

Retirement *security*, *today*, tomorrow, *together*.



# PSRS/PEERS/

PUBLIC SCHOOL & EDUCATION EMPLOYEE RETIREMENT SYSTEMS OF MISSOURI





together.

# PSRS/PEERS/

**PUBLIC SCHOOL & EDUCATION EMPLOYEE** RETIREMENT SYSTEMS OF MISSOURI

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## MISSION STATEMENT

The Public School Retirement System of Missouri and the Public Education Employee Retirement System of Missouri (PSRS and PEERS) work in partnership with the member school districts of this state to provide eligible employees and their beneficiaries with a significant source of income based on the employee's length of service and compensation in order to enhance retirement, disability and death benefits received from other sources.

It is the fiduciary responsibility of those charged with administration of PSRS and PEERS to:

- Effectively collect contributions,
- Prudently invest the assets to obtain optimum returns,
- · Equitably provide benefits, and
- Impartially and in accordance with applicable law administer the benefit programs.

The PSRS/PEERS Board of Trustees and staff are committed to providing services to the members and beneficiaries professionally, promptly, courteously and efficiently.

## **Mission Statement Principles**

- We will conduct the business of the Retirement Systems in accordance with the mission statement.
- We will act as fiduciaries in the management of all funds for the exclusive benefit of our members.
- We will adhere to our investment policy to ensure the highest possible investment return consistent with the prudent investment of plan assets.
- We will have as our goal the replacement of 80% of a member's final average salary after a 30-year career through the combination of income from public pensions and, when applicable, the federal Social Security system.
- We will have as our goal the retention of purchasing power of the initial retirement benefit through the retirement years.
- We will maintain an independent retirement system
  that retains the power of the trustees to set actuarial
  assumptions, appoint consultants, employ staff,
  establish a budget and conduct all business of the
  Retirement Systems.
- We will prepare and distribute an annual financial report that adheres to U.S. generally accepted accounting principles.
- We will provide prompt, courteous and accurate service to our members.
- We will provide clear and complete information to the members and the districts through the use of a summary plan document, newsletters, an annual member account statement and any other documents deemed necessary.
- We will adhere to the highest standards of ethical conduct.



enjoying retirement, or just starting out. We are proud to serve you, and provide you with the strong, stable and secure retirement benefits you earn through years of hard work. After being there for our children, know we will be there for you, providing retirement security – **today, tomorrow,** *together*.

We say thank you, to each and every one, currently working,

The men and women pictured in this report are members of PSRS/PEERS. The PSRS/PEERS Board of Trustees, management and staff would like to extend our thanks to each of these extraordinary individuals for allowing us to include their photographs.

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## **BOARD OF TRUSTEES**



**Dr. Aaron Zalis**Chair
Elected PSRS
Member



**Wayne Wheeler** Vice Chair Appointed Retired Member



**Donald Cupps, J.D.**Appointed Member



Yvonne Heath Elected PSRS Member



**Jason Hoffman**Elected PEERS
Member



**Scott Hunt** Appointed Member



Susan McClintic Elected PSRS Member

## TRANSMITTAL LETTER



November 25, 2013

To the Board of Trustees and Members of the Retirement Systems:

We are pleased to present the *Comprehensive Annual Financial Report* (*CAFR*) of the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS) for the fiscal year ended June 30, 2013. *Today, tomorrow, together*...we are proud to provide a secure retirement to our members.

In addition to providing information to our Board of Trustees and members concerning the financial condition of the Systems, this report also meets our reporting requirements under Sections 169.020. (4).16 and 169.450(4).11 of the Revised Statues of Missouri (RSMo). Printed copies are available to the public upon request and the complete report is also posted on our website, **www.psrs-peers.org**.

This letter provides a brief overview of the contents of the CAFR. We encourage you to read the Management's Discussion and Analysis on pages 15 to 18 for a more detailed analysis of our financial position for the fiscal year.

## **Report Contents and Structure**

Responsibility for the preparation, accuracy and completeness of this report, including all disclosures, rests with the management staff of PSRS/PEERS (the Systems). The Systems' financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP) within the guidelines established by the Governmental Accounting Standards Board (GASB). To the best of our knowledge, the enclosed data is accurate in all material respects and fairly presents our financial position and operating results.

The management of the Systems is responsible for internal accounting controls, which are designed to provide reasonable but not absolute assurance for the safeguarding of assets and the reliability of financial records. The cost of internal controls should not exceed the benefits to be derived. The objective of internal controls is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements. The Systems employ two internal auditors who perform operational reviews to ensure that the internal controls are functioning effectively. We believe the internal controls in place are adequate to meet the purpose for which they were intended.

Our independent external auditors selected by the Board of Trustees have conducted an audit of the basic financial statements in accordance with U.S. generally accepted auditing standards. This audit and the financial statements are presented on pages 13 to 44 of this report.

 Location 3210 W. Truman Blvd. / Jefferson City, M0 65109
 Mail P.O. Box 268 / Jefferson City, M0 65102
 Phone (573) 634-5290

 Toll Free (800) 392-6848
 Email psrspeers@psrspeers.org
 Member Services FAX (573) 634-7934
 Employer Services FAX (573) 634-7911

## **Overview of the Retirement Systems**

The Public School Retirement System of Missouri (PSRS), a cost-sharing multiple employer retirement system, was established in 1946 by an act of the Missouri legislature to provide certificated public school employees and their families with a significant and stable source of retirement income, disability and survivor benefits. The majority of PSRS members do not contribute to Social Security.

The Non-Teacher School Employee Retirement System of Missouri (NTRS), also a cost-sharing multiple employer retirement system, was established in 1965 by an act of the Missouri legislature to build a plan similar to PSRS, but for non-certificated public school personnel. The name of the non-teacher system was changed to the Public Education Employee Retirement System of Missouri (PEERS) in August 2005 to more positively represent the members of the System. Members of PEERS contribute to Social Security.

PSRS and PEERS are governed jointly by a seven-member Board of Trustees, composed of three elected PSRS members, one elected PEERS member and three members appointed by the governor.

Unlike most public pension systems, the members of PSRS and PEERS share equally in funding the contributions to the Retirement Systems. This funding mechanism has kept the employer contributions lower than many public plans while still providing a very good benefit package to members.

The combined Systems serve almost 230,000 total members in 537 districts and other employers. Approximately \$182 million is paid monthly to over 75,000 service retirees and beneficiary recipients. At June 30, 2013, PSRS/PEERS had a market value of invested assets of approximately \$33.5 billion, making it larger than all other retirement systems in the state of Missouri combined.

#### **Investment Activities**

The PSRS and PEERS total investment returns for the current fiscal year were 12.6% and 12.3%, respectively, compared to the prior fiscal year returns of 1.9% for PSRS and 1.6% for PEERS. The fiscal year returns exceeded policy benchmarks by 1.25% in PSRS and .91% in PEERS adding over \$380 million in excess returns to the Systems. The three-year annualized fund performance for the period ended June 30, 2013 was 11.8% for PSRS and 11.5% for PEERS. The 25-year annualized return of 8.5% remains above the Systems' long-term return objective of 8%.

Additional detailed information regarding the PSRS and PEERS investments can be found in the Investment Section of this report beginning on page 45.

## **Funding Status and Valuation Results**

As of June 30, 2013, PSRS was 80.1% funded, while PEERS was 81.6% funded. Both Systems showed a slight decrease in funding from the June 30, 2012 funded percentages of 81.5% for PSRS and 82.5% for PEERS. This decrease occurred due to the final recognition of all 2009 investment losses. At June 30, 2013, the market value of assets for the Systems exceeded the actuarial value of assets used to calculate the funded percentages.

Based upon the June 30, 2013 valuation, the Board of Trustees was able to set the fiscal year 2015 contribution rates at the fiscal year 2014 level for both members and employers. This was the fourth year that rates remained constant. The Systems have maintained solid funded positions without raising the contribution rates due to the Funding Stabilization Policy enacted by the Board of Trustees in 2011 and the exemplary investment returns achieved by our internal investment staff and outside investment managers.

## TRANSMITTAL LETTER (continued)

## **Legislative Changes During 2012-2013**

On July 11, Governor Jay Nixon signed legislation making the 25-and-Out early retirement provision a permanent retirement option for members of PSRS and PEERS. The same bill extended the availability of the PSRS 2.55% benefit factor for 31 or more years of service through July 1, 2014. CCS HCS SCS Senate Bill 17 became law effective August 28, 2013. These changes resulted in an actuarial savings to the combined Systems of \$60 million.

#### **Awards**

## Public Pension Coordinating Council (PPCC), Public Pension Standards Award

PSRS and PEERS each received the Public Pension Standards Awards in 2013 in recognition of meeting professional standards for plan administration and plan funding as set forth in the Public Pension Standards of the PPCC. These awards are presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).

## Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PSRS and PEERS for the *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2012. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR whose contents meet or exceed program standards. This report must satisfy both U.S. generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for only one year. We believe our current report continues to meet the Certificate of Achievement program requirements and are submitting it to GFOA for consideration again this year.

## **Professional Services**

Certain professional services are provided to the Systems by retained consultants. The required opinion letters from two of those consultants, PricewaterhouseCoopers, LLC, actuaries, and Williams Keepers LLC, independent certified public accountants, are contained elsewhere in this report.

Investment consulting services, as well as investment manager search assistance and investment performance analysis, have been provided by Towers Watson.

## Acknowledgements

We would like to express our thanks and gratitude to the Board of Trustees, staff, and consultants who have worked diligently to produce this report and to ensure the successful operation of the Systems.

Respectfully submitted,

M. Steve Yoakum Executive Director Lori Woratzeck, CPA Chief Financial Officer

Sou Woratzck

# **Certificate of Achievement for Excellence** in Financial Reporting



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

The Public School and Education Employee Retirement Systems of Missouri

> For its Comprehensive Annual Financial Report for the Fiscal Year Ended

> > June 30, 2012

Executive Director/CEO

Jeffry R. Ener

## Public Pension Coordinating Council (PPCC), Public Pension Standards Awards



**Public Pension Coordinating Council** 

## Public Pension Standards Award For Funding and Administration 2013

Presented to

## Public School Retirement System of Missouri

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

Alan H. Winkle



**Public Pension Coordinating Council** 

Public Pension Standards Award For Funding and Administration 2013

Presented to

## Public Education Employee Retirement System of Missouri

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

Alan H. Winkle

## **ADMINISTRATIVE ORGANIZATION**



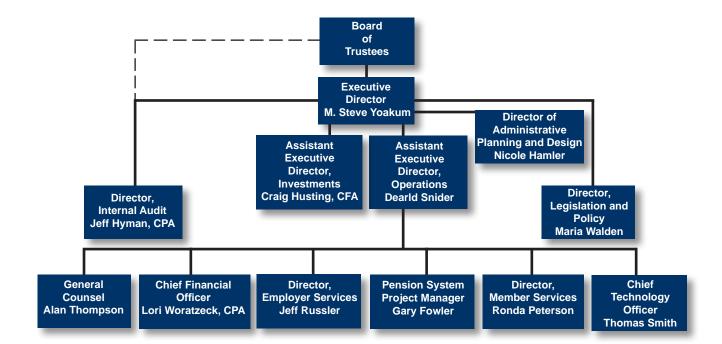
**M. Steve Yoakum** Executive Director



**Craig Husting, CFA**Assistant Executive
Director, Investments



**Dearld Snider**Assistant Executive
Director, Operations



## PROFESSIONAL SERVICES

June 30, 2013

## **ACTUARIES**

## PricewaterhouseCoopers, LLC

Actuaries and Consultants Sheldon Gamzon, FSA, EA, MAAA Brandon Robertson, ASA, EA, MAAA Chicago, Illinois New York, NY

## **AUDITOR**

## Williams Keepers, LLC

Heidi A. Chick, CPA Amanda Pinkerton, CPA Columbia, Missouri

## **TECHNOLOGY CONSULTANTS**

## Aspect Software, Inc.

Jim McPherson St. Charles, MO

## Fishnet Security, Inc.

Robert Richardson Chicago, Illinois

## **Huber & Associates**

James Huber Jefferson City, Missouri

## L.R. Wechsler, Ltd.

Ben Lott William Morrow Fairfax, Virginia

## Sagitec Solutions, LLC

Rod Sheppard Jeff Freeman Roseville, Minnesota

## TowerWall, Inc.

Michelle Drolet Holliston, Massachusetts

## **Towner Communication Systems**

Mark Towner Jefferson City, Missouri

## **INSURANCE CONSULTANTS**

#### Charlesworth & Associates

Bob Charlesworth Overland Park, Kansas

## Wallstreet Insurance Group

Lee Wilbers Jefferson City, Missouri

## OTHER CONSULTANTS

#### Cortex

Dr. John Por Toronto, Ontario

## **LEGAL COUNSEL**

## **Groom Law Group**

David Levine Washington, D.C.

## Pillsbury, Winthrop, Shaw, Pittman, LLP

Dulcie Brand Los Angeles, California

## Thompson Coburn, LLP

Allen Allred St. Louis, Missouri

## LEGISLATIVE CONSULTANT

## James R. Moody & Associates

James "Jim" Moody Jefferson City, Missouri

## **MEDICAL ADVISOR**

## Andrew Matera, M.D.

Columbia, Missouri

Investment Management, Custodial and Consulting fees can be found in the Schedule of Investment Expenses on page 88. Additional information on Investment Managers can also be found in the Investment Section of this report.



society.

the talented staff at their schools, they provide

our children to learn, grow and become strong,

a stable, inviting and secure environment for

dedicated adults and productive members of



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## INDEPENDENT AUDITORS' REPORT



2005 West Broadway, Ste. 100, Columbia, MO 65203 OFFICE (573) 442-6171 FAX (573) 777-7800

3220 West Edgewood, Ste. E, Jefferson City, MO 65109 OFFICE (573) 635-6196 FAX (573) 644-7240

www.williamskeepers.com

The Board of Trustees of the Public School and Public Education Employee Retirement Systems of Missouri

We have audited the accompanying financial statements of the Public School and Public Education Employee Retirement Systems of Missouri (the Systems), which comprise the statements of plan net position as of June 30, 2013, the related statements of changes in plan net position for the year then ended, and the related notes to the financial statements.

## Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

## Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with U.S. generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

## **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Public School and Public Education Employee Retirement Systems of Missouri as of June 30, 2013, and the respective changes in financial position for the year then ended, in conformity with U.S. generally accepted accounting principles.

#### Other Matters

#### **Prior Year Information**

The prior year combined total information has been derived from the Systems' 2012 financial statements and, in our report dated October 24, 2012, we expressed unqualified opinions on the respective financial statements of the Systems' net position.

## **Required Supplementary Information**

U.S. generally accepted accounting principles require that the management's discussion and analysis and the schedules of funding progress and employer contributions on pages 15-18 and 40-42 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with U.S. generally accepted auditing standards, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Public School and Public Education Employee Retirement Systems of Missouri's basic financial statements. The introductory, investment, actuarial and statistical sections and the additional information presented on pages 43 and 44 are presented for purposes of additional analysis, and are not a required part of the financial statements.

The additional information presented on pages 43 and 44 is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the additional information presented on pages 43 and 44 is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

October 25, 2013

American Institute of Certified Public Accountants Missouri Society of Certified Public Accountants PKF North American Network

Ir Cluams Keepers Le

Superior service. Creative solutions. Exceptional clients.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the financial position of the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS), collectively referred to as the Systems, provides an overview of the Systems' financial activities for the fiscal year ended June 30, 2013. We encourage you to consider the information presented here in conjunction with additional information presented in the financial statements and required supplementary information.

## **Financial Highlights**

The following highlights are explained in more detail for each System later in this discussion.

- The net position of the combined Systems increased by \$2.9 billion. The net position of PSRS increased by \$2.6 billion, while the net position of PEERS increased by \$352.0 million.
- The Systems' strong investment program, coupled with strong overall returns in the global stock market, resulted in the achievement of a 12.6% return for PSRS and a 12.3% return for PEERS. The returns are well above the 8% investment return goal set for the System. The Systems' market value of invested assets increased through investment earnings by over \$3 billion from the previous year.
- As of June 30, 2013, the funded ratios were 80.1% for PSRS and 81.6% for PEERS. As of June 30, 2012, the funded ratios were 81.5% for PSRS and 82.5% for PEERS. To arrive at the actuarial value of assets as of June 30, 2013 and 2012, the Systems used an asset smoothing method by which investment returns above or below 8% are recognized over a five-year period.
- The Systems' funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. This funding is to be carried out in such a way to ensure that the burden of paying retirement costs shall be shared equitably by present and succeeding generations of members and taxpayers. The Systems continue their dedication to providing a stable and secure retirement to their members.

- Total revenues for fiscal year 2013 were comprised of contribution revenue of \$1.5 billion and investment gains of \$3.7 billion, compared to contribution revenue of \$1.48 billion and investment gains of \$489.6 million for fiscal year 2012.
- Expenses increased 5.4% over the prior year from \$2.2 billion to \$2.3 billion. Retirement benefits and member refunds increased by \$118.4 million from the prior year, while administrative expenses increased by \$0.2 million during the same time period.

#### Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the financial report of the Systems. The financial report consists of: the basic financial statements, comprised of the Statements of Plan Net Position and the Statements of Changes in Plan Net Position, the notes to the basic financial statements, and the required and other supplementary information.

The Statements of Plan Net Position (page 20) present information on the assets and liabilities of the Systems, with the difference between the two reported as net position. The net position of the Systems reflects the resources available to pay benefits to members when due. Over time, increases and decreases in net position measure whether the Systems' financial position is improving or deteriorating.

The Statements of Changes in Plan Net Position (page 21) present information detailing the changes in net position that occurred during the current fiscal year. All changes in net position are reported on an accrual basis. This means that the revenue or expense is recognized as soon as the underlying event giving rise to the change occurs, regardless of when the actual cash is received or paid. Thus, revenues and expenses are reported in this statement for some items that will not result in cash flows until future fiscal periods. For example, contributions due from an employer, even though not yet paid by year end, will be reflected as revenue. Earned vacation accruals will be reflected as an expense, even though they have not been paid to employees.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes can be found on pages 22 through 40. The report also contains required supplementary information in addition to the basic financial statements themselves.

The Schedules of Funding Progress (page 40) include historical trend information about the actuarially funded status of each System from a long-term, ongoing perspective and the progress made in accumulating assets to pay benefits when due.

The Schedules of Employer Contributions (page 41) present historical trend information about the annual required contributions of employers and the actual contributions made by employers.

The Schedule of Funding Progress (page 42) includes historical trend information about the actuarially funded status of the defined benefit other post employment benefit (OPEB) plan from a long-term, ongoing perspective and the progress made in accumulating assets to pay benefits when due.

The Schedule of Employer Contributions (page 42) presents historical trend information about the annual required contributions of the employer and the actual employer contributions made for the defined benefit OPEB plan.

The Schedule of Percentage of Other Post Employment Benefit (OPEB) Cost Contributed (page 42) presents historical trend information about the annual OPEB costs and the actual contributions made for the defined benefit OPEB plan.

Other supplementary schedules are also included. The Schedules of Administrative Expenses (page 43) present the overall cost of administering the Systems. The Schedules of Professional Services (page 44) further detail this category of administrative expense.

The Schedules of Investment Expenses (page 44) show the costs associated with investing the assets of the Systems. These expenses are shown as a reduction of revenue on the Statements of Changes in Plan Net Position.

## Financial Analysis of the Public School Retirement System of Missouri (PSRS)

PSRS is a mandatory cost-sharing multiple employer retirement system for full-time certificated employees and certain part-time employees of participating employers. PSRS members were required to contribute 14.5% of their annual covered salary during fiscal year 2013. The employer was required to contribute an equal amount. Most PSRS members do not contribute to Social Security, except for employees hired after 1986 who contribute to Medicare only.

Public School Retirement System of Missouri Plan Net Position (000's)						
	2013	2012	Change			
Cash & investments	\$ 33,880,619	\$ 31,015,849	\$ 2,864,770			
Receivables	1,254,326	1,862,705	(608,379)			
Other	21,413	17,517	3,896			
Total assets	35,156,358	32,896,071	2,260,287			
Total liabilities	4,780,941	5,079,298	(298,357)			
Plan net position	\$ 30,375,417	\$ 27,816,773	\$ 2,558,644			

#### **Assets**

Total assets of PSRS as of June 30, 2013 were \$35.2 billion and were mostly comprised of cash, investments, investment sales receivables and contributions due from employers. Total assets increased by \$2.3 billion or 6.9% from the prior year due to investment earnings during the year.

## Liabilities

Total liabilities as of June 30, 2013, were \$4.8 billion and were mostly comprised of payables from the purchase of investments and obligations under security lending arrangements. Total liabilities decreased by \$298.4 million from the prior year. This was due to a decrease in investment purchase liabilities as well as obligations under security lending arrangements.

## **Net Position**

PSRS assets exceeded liabilities at June 30, 2013, by \$30.4 billion. This was an increase of \$2.6 billion from 2012 net position. This increase was a result of investment earnings that totaled \$3.4 billion for the year offset by benefit payments and other expenses which exceeded contribution revenue by \$819.9 million. This trend is a natural progression in a mature defined benefit plan.

Public School Retirement System of Missouri Changes in Plan Net Position (000's)					
Changes	2013	2012	Change		
Additions		2012	Change		
Member contributions	\$ 665,926	\$ 658,936	\$ 6,990		
Employer contributions	634,040	620,214	13,826		
Investment income	3,378,531	449,822	2,928,709		
Other	20	8	12		
Total additions	4,678,517	1,728,980	2,949,537		
Deductions					
Monthly benefits	2,055,764	1,950,231	105,533		
Refunds of contributions	55,394	54,456	938		
Administrative expenses	8,712	7,701	1,011		
Other	3	-	3		
Total deductions	2,119,873	2,012,388	107,485		
Change in plan net position	\$2,558,644	\$(283,408)	\$2,842,052		

## Revenues - Additions to Plan Net Position

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contribution revenue for the year increased by \$20.8 million to \$1.3 billion. This was a 1.6% increase over the prior year. Retirement contributions were calculated at 14.5% of retirement salary for each member during fiscal year 2013. The employer matched this amount. Contribution rates were unchanged from the prior year. In addition to contributions on salary, members may also pay contributions to reinstate previously refunded service or to purchase various types of elective service. Such contributions for the year decreased by \$4.7 million. This decrease combined with an increased salary base resulted in the overall contributions increase of 1.6%.

The net investment gain was \$3.4 billion as compared to a net investment gain of \$449.8 million in 2012. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

## **Expenses - Deductions from Plan Net Position**

The primary expenses of PSRS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2013 were \$2.1 billion, an increase of 5.3% over fiscal year 2012.

Benefit expenses increased by \$105.5 million. This was a result of the addition of 2,710 new service and disability retirees. There were no changes to the benefit formula during 2013. Refunds of contributions increased by \$0.9 million to \$55.4 million.

Administrative expenses increased by \$1.0 million to \$8.7 million. This was a 13.1% increase, which is attributable to increased depreciation and legal fee expenses. The cost of these items was charged 62% to PSRS and 38% to PEERS, unless the expense was determined to be of direct benefit to only one System. In such an instance, the allocation of expense was 100% to the benefited System. As always, we will continue to look for ways to streamline costs when prudent.

## Financial Analysis of the Public Education Employee Retirement System of Missouri (PEERS)

PEERS is a mandatory cost-sharing multiple employer retirement system for non-certificated employees and certain part-time certificated employees of participating employers. PEERS members were required to contribute

6.86% of their annual covered salary during 2013. The employer was required to contribute an equal amount. PEERS members also contribute to Social Security.

Public Education Employee Retirement System of Missouri Plan Net Position (000's)						
2013 2012 Change						
Cash & investments	\$3,706,208	\$ 3,317,935	\$ 388,273			
Receivables	113,222	184,894	(71,672)			
Total assets	3,819,430	3,502,829	316,601			
Total liabilities	502,917	538,272	(35,355)			
Plan net position	\$3,316,513	\$ 2,964,557	\$351,956			

#### **Assets**

Total assets of PEERS as of June 30, 2013 were \$3.8 billion and were mostly comprised of cash, investments, investment sales receivables and contributions due from employers. Total assets increased by \$316.6 million or 9.0% from the prior year due to investment gains.

#### Liabilities

Total liabilities as of June 30, 2013 were \$0.5 billion and were mostly comprised of payables from the purchase of investments and obligations under security lending arrangements. Total liabilities decreased by \$35.4 million. This was due to a decrease in investment purchase liabilities and obligations under security lending arrangements.

## **Net Position**

PEERS assets exceeded liabilities at the close of fiscal year 2013 by \$3.3 billion. This was up from 2012 net position of \$3.0 billion by \$352.0 million. This increase was a result of investment earnings that totaled \$353.7 million for the year offset by benefit payments and other expenses which exceeded contribution revenue by \$1.8 million. This trend is a natural progression in a mature defined benefit plan.

Public Education Employee Retirement System of Missouri Changes in Plan Net Position (000's)						
		2013		2012		Change
Additions	_					
Member contributions	\$	103,271	\$	101,931	\$	1,340
Employer contributions		97,058		95,094		1,964
Investment income		353,729		39,774		313,955
Total additions		554,058		236,799		317,259
Deductions						
Monthly benefits		178,663		166,945		11,718
Refunds of contributions		18,636		18,470		166
Administrative expenses		4,801		5,591		(790)
Other		2		-		2
Total deductions		202,102		191,006		11,096
Change in plan net position	\$	351,956	\$	45,793	\$	306,163

## Revenues - Additions to Plan Net Position

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contribution revenue for the year increased by \$3.3 million to \$200.3 million. Retirement contributions were calculated at 6.86% of retirement salary for each member during fiscal year 2013. The employer matched this amount. Contribution rates were unchanged from the prior year. Overall contribution revenue increased by 1.7%. In addition to contributions on salary, members may also pay contributions to reinstate previously refunded service or to purchase various types of elective service. Such contributions for the year decreased by \$0.6 million. The increase in total contributions is attributable to a higher salary base.

The net investment gain was \$353.7 million as compared to a net investment gain of \$39.8 million in 2012. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

## **Expenses - Deductions from Plan Net Position**

The primary expenses of PEERS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2013 were \$202.1 million, an increase of 5.8% over fiscal year 2012.

Benefit expenses increased by \$11.7 million. This was a result of the addition of 1,724 new service and disability retirees. There were no changes to the benefit formula during 2013. Refunds of contributions increased by \$0.2 million to \$18.6 million.

Administrative expenses decreased to \$4.8 million. This was a 14.1% decrease. This decrease is attributable to a reduction in depreciation allocated from PSRS. Administrative costs were charged 62% to PSRS and 38% to PEERS, unless the expense was determined to be of direct benefit to only one System. In such an instance, the allocation of expense was 100% to the benefited System. As always, we will continue to look for ways to streamline costs when prudent.

## **Summary**

The total returns for PSRS of 12.6% and PEERS of 12.3% exceed both the long-term investment goal (actuarially assumed return) of earning 8.0% and the total plan policy benchmark return of 11.2%. Due to the long-term nature of defined benefit pension plans, it is important to look at the financial performance of the Systems over a period of years and not just at this single point in time. Over long periods of time, the Systems continue to produce investment returns that meet or exceed the System objectives. The annualized investment returns for the Systems over the last 30 years is 9.3%.

The recommended fiscal year 2015 contribution rates for both PSRS and PEERS are unchanged from fiscal years 2014 and 2013. The recommended fiscal year 2015 contribution rate for PSRS remains 29.0%. The recommended fiscal year 2015 contribution rate for PEERS remains 13.72%. The fiscal year 2015 contribution rates for both PSRS and PEERS represent a continued stabilization of the rates. These contribution rate levels adhere to the PSRS/PEERS' Funding Stabilization Policy.

The Board of Trustees, management and staff continually strive to improve the financial position of the Systems through a prudent investment program and long-term strategic planning.

## **Requests for Information**

This financial report is designed to provide the Board of Trustees, our members, and other users of our financial report with a general overview of the Systems' finances and to demonstrate the Systems' accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the Public School and Education Employee Retirement Systems of Missouri (PSRS/PEERS), P.O. Box 268, Jefferson City, MO 65102, or (573) 634-5290.

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## Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri Statements of Plan Net Position

as of June 30, 2013 with comparative totals for June 30, 2012

		Combined Totals			
	PSRS	PEERS	June 30, 2013	June 30, 2012	
ASSETS					
Cash	\$ 169,902,337	\$ 28,166,834	\$ 198,069,171	\$ 104,034,923	
Receivables					
Contributions	178,731,736	18,634,321	197,366,057	179,399,068	
Accrued interest and dividends	61,298,852	6,935,393	68,234,245	136,068,087	
Investment sales	1,014,191,683	87,558,789	1,101,750,472	1,731,634,205	
Due from PSRS	-	44,887	44,887	348,642	
Other	103,789	48,516	152,305	148,537	
Total receivables	1,254,326,060	113,221,906	1,367,547,966	2,047,598,539	
Investments, at fair value					
U.S. Treasuries and TIPS	3,935,369,118	475,487,895	4,410,857,013	4,650,814,837	
U.S. public equities	12,214,140,705	1,309,932,685	13,524,073,390	11,567,926,039	
Global public equities	5,019,173,070	586,447,060	5,605,620,130	4,718,242,974	
Short term investments	423,563,153	72,622,595	496,185,748	484,428,236	
Public debt	2,507,832,495	260,846,433	2,768,678,928	2,838,509,767	
Private equity	2,152,507,128	182,032,741	2,334,539,869	2,104,681,164	
Private credit	359,475,497	29,417,435	388,892,932	424,897,967	
Private real estate	2,324,219,246	250,191,479	2,574,410,725	2,261,110,814	
Hedged assets	4,340,446,232	462,085,204	4,802,531,436	4,606,574,803	
Total investments	33,276,726,644	3,629,063,527	36,905,790,171	33,657,186,601	
Invested securities lending collateral	433,989,546	48,977,204	482,966,750	572,562,122	
Prepaid expenses	144,842	-	144,842	125,353	
Capital assets, net of accumulated depreciation	21,267,894	-	21,267,894	17,391,271	
Total assets	35,156,357,323	3,819,429,471	38,975,786,794	36,398,898,809	
LIABILITIES					
Accounts payable	15,752,513	1,748,139	17,500,652	15,466,431	
Interest payable	49,867	5,525	55,392	326,963	
Securities lending collateral	433,979,782	48,976,102	482,955,884	599,083,785	
Investment purchases	4,329,286,136	451,099,920	4,780,386,056	4,999,882,083	
Due to PEERS	44,887	-	44,887	348,642	
Net other post employment benefit obligation	728,613	470,687	1,199,300	949,200	
Compensated absences	1,098,732	616,302	1,715,034	1,512,107	
Total liabilities	4,780,940,530	502,916,675	5,283,857,205	5,617,569,211	
NET POSITION - RESTRICTED					
FOR PENSION BENEFITS	\$ 30,375,416,793	\$ 3,316,512,796	\$ 33,691,929,589	\$ 30,781,329,598	

Note: See accompanying Notes to the Financial Statements.

## Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri Statements of Changes in Plan Net Position

for the year ended June 30, 2013 with comparative totals for the year ended June 30, 2012

**Combined Totals Year Ended PSRS** PEERS June 30, 2013 June 30, 2012 **ADDITIONS** Contributions 731,099,648 Employer 634,040,335 97,059,313 715,309,016 Member 665,925,539 103,270,505 769,196,044 760,866,455 Total contributions 1,500,295,692 1,476,175,471 1,299,965,874 200,329,818 Investment income From investing activities: Net appreciation in fair value of investments 3,369,272,378 357,614,096 3,726,886,474 350,632,346 19,052,626 187,099,872 207,988,709 Interest from investments 168,047,246 Interest from bank deposits 47,988 1,242 49,230 40,677 155,854,945 171,995,221 176,058,840 Dividends 16,140,276 Total investment income 3,693,222,557 392,808,240 4,086,030,797 734,720,572 255,957,916 Less investment expenses 336,128,965 41,019,143 377,148,108 Net income from investing activities 3,357,093,592 351,789,097 3,708,882,689 478,762,656 From security lending activities: Security lending gross income 2,607,098 262,674 2,869,772 2,820,033 Net appreciation in fair value of security 1,202,970 lending collateral 14,044,758 15,247,728 2,520,626 Less security lending activity expenses: Agent fees 1,383,602 141,857 1,525,459 1,513,030 Broker rebates paid (received) (6,169,218)(616, 159)(6,785,377)(7,005,019)Total security lending expenses (4,785,616)(474,302)(5,259,918)(5,491,989) Net income from security lending activities 21,437,472 1,939,946 23,377,418 10,832,648 Total net investment income 353,729,043 489,595,304 3,378,531,064 3,732,260,107 Other income Miscellaneous income 20,305 20,305 7,711 Total other income 20,305 20,305 7,711 Total additions 4,678,517,243 554,058,861 5,232,576,104 1,965,778,486 **DEDUCTIONS** Monthly benefits 2,055,763,858 178,663,339 2,234,427,197 2,117,176,610 Refunds of contributions 55,394,344 18,636,409 74,030,753 72,925,581 Administrative expenses 8,712,314 4,801,080 13,513,394 13,291,496 Other expenses 2,495 2,274 4,769 315 Total deductions 2,203,394,002 2,119,873,011 202,103,102 2,321,976,113 Net increase (decrease) 2,558,644,232 351,955,759 2,910,599,991 (237,615,516)**NET POSITION - RESTRICTED** FOR PENSION BENEFITS 27,816,772,561 31,018,945,114 Beginning of year 2,964,557,037 30,781,329,598 End of year \$ 30,375,416,793 \$ 30,781,329,598 \$3,316,512,796 \$33,691,929,589

Note: See accompanying Notes to the Financial Statements.

## NOTES TO THE FINANCIAL STATEMENTS

June 30, 2013 (with comparative information for June 30, 2012)

## Note 1 - Plan Descriptions

The Board of Trustees of the Public School Retirement System of Missouri administers two separate retirement systems, the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS). The Board of Trustees consists of seven members, three of whom are elected PSRS active members, one an elected active member of PEERS and three persons appointed by the governor, one of whom must be a retired member of either PSRS or PEERS.

The funds of the two Systems are managed simultaneously, but each System retains title to its own investments. Each System's assets may be used only for the payment of benefits to the members of the separate System in accordance with the statutes governing that System as well as expenses required to administer the System.

## The Public School Retirement System of Missouri (PSRS)

PSRS is a mandatory cost-sharing multiple employer retirement system for all full-time certificated employees and certain part-time certificated employees of all public school districts in Missouri (except the school districts of St. Louis and Kansas City) and all public community colleges. The System also includes certificated employees of PSRS, Missouri State Teachers' Association, Missouri State High School Activities Association, and certain employees of the state of Missouri who elected to remain covered by PSRS under legislation enacted in 1986, 1987 and 1989. The majority of PSRS members are exempt from Social Security contributions. In some instances, positions may be determined not to be exempt from Social Security contributions. Any PSRS member who is required to contribute to Social Security comes under the requirements of Section 169.070 (9) RSMo, known as the "2/3's statute." PSRS members required to contribute to Social Security are required to contribute two-thirds of the approved PSRS contribution rate and their employer is required to match the contribution. The members' benefits are further calculated at twothirds the normal benefit amount.

PSRS was established as an independent trust fund by an Act of the Missouri General Assembly effective August 1, 1945. Statutes governing the System are found in Sections 169.010-169.141 and Sections 169.560-169.595 RSMo. It is a defined benefit plan providing service retirement, death and disability benefits to its members. Members are vested for service retirement benefits after accruing five years of service. Individuals who (a) are at least age 60 and have a minimum of five years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 2.5% benefit factor. Beginning July 1, 2001, and ending July 1, 2014, a 2.55% benefit factor is used to calculate benefits for members who have 31 or more years of service. Actuarially age-reduced retirement benefits are available with five to 24.9 years of service at age 55. Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of service may retire with a lesser benefit factor. Members that are three years beyond normal retirement can elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a onetime partial lump sum (PLSO) payment at retirement equal to 12, 24, or 36 times the Single Life benefit amount. Annual cost-of-living adjustments (COLAs) are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional benefit plans, up to a lifetime maximum of 80% of the original benefit amount.

Contributions – PSRS members were required to contribute 14.5% of their annual covered salary during fiscal years 2013 and 2012. Employers were required to match the contributions made by employees. The contribution rate is set each year by the PSRS/PEERS Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions set in Section 169.030 RSMo. The annual statutory increase in the total contribution rate may not exceed 1% of salary. Administrative costs are financed through investment earnings. Contributions for employees of the state of Missouri were made by the state in accordance with the actuarially determined contribution rate needed to fund current costs and prior service costs of state employees as authorized in Section 104.342.8 RSMo.

*Members* – The number of PSRS members and benefit recipients served by the System at June 30 was:

		20	2013		)12
Retirees and bene	ficiaries receiving	benefits	52,306		50,344
Inactive members	entitled to, but n	ot			
yet receiving be	enefits		7,203		6,891
Active members:	Vested	59,556	6	58,943	
	Non-vested	18,520	)	18,586	
Total active memb	bers		78,076		77,529
Other inactive me	embers		4,446		4,632
Total			142,031	_	139,396

*Employers* – PSRS had 537 contributing employers during fiscal years 2013 and 538 during fiscal year 2012.

## The Public Education Employee Retirement System of Missouri (PEERS)

PEERS is a mandatory cost-sharing multiple employer retirement system for all public school district employees (except the school districts of St. Louis and Kansas City), employees of the Missouri Association of School Administrators, and community college employees (except the St. Louis Community College). Employees of covered districts who work 20 or more hours per week on a regular basis and who are not contributing members of the Public School Retirement System of Missouri (PSRS) must contribute to PEERS. Employees of PSRS who do not hold Missouri educator certificates also contribute to PEERS.

PEERS was established as a trust fund by an Act of the Missouri General Assembly effective October 13, 1965. Statutes governing the System are found in Sections 169.600 - 169.715 and Sections 169.560-169.595 RSMo. The statutes place responsibility for the operation of PEERS on the Board of Trustees of the Public School Retirement System of Missouri.

PEERS is a defined benefit plan providing service retirement and disability benefits to its members. Members are vested for service retirement benefits after accruing five years of service. Individuals who (a) are at least age 60 and have a minimum of five years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 1.61% benefit factor. Members qualifying for "Rule of 80" or "30-and-Out" are entitled

to an additional temporary .8% benefit multiplier until reaching minimum Social Security age (currently age 62). Actuarially age-reduced retirement benefits are available with five years of service at age 55. Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of service may retire with a lesser benefit factor. Members who are three years beyond normal retirement can elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time partial lump sum (PLSO) payment at retirement equal to 12, 24, or 36 times the Single Life benefit amount. Annual cost-of-living adjustments (COLAs) up to a lifetime maximum of 80% of the original benefit amount are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional benefit plans.

Contributions – PEERS members were required to contribute 6.86% of their annual covered salary during fiscal years 2013 and 2012. Employers were required to match the contributions made by their employees. The contribution rate is set each year by the PSRS/PEERS Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions in Section 169.620 RSMo. The annual statutory increase in the total contribution rate may not exceed .5% of salary. Administrative costs proportional to its membership size are reimbursed by PEERS to the Public School Retirement System of Missouri (PSRS) and are financed through investment earnings.

*Members* – The number of PEERS members and benefit recipients served by the System at June 30 was:

		20	13	2012	
Retirees and bene	ficiaries receiving	benefits	23,674		22,562
Inactive members	entitled to, but 1	not			
yet receiving be	enefits		5,140		4,940
Active members:	Vested	29,796		29,199	
	Non-Vested	18,913		19,406	
Total active memb	pers		48,709		48,605
Other inactive me	embers		9,299		9,612
Total			86,822		85,719

*Employers* – PEERS had 533 contributing employers during fiscal year 2013 and 534 during fiscal year 2012.

## Note 2 – Summary of Significant Accounting Policies

Basis of Accounting – The financial statements of both Systems were prepared using the accrual basis of accounting. For both Systems, member and employer contributions are recognized when due, pursuant to formal commitments and statutory requirements. Benefits and refunds are recognized when due and payable in accordance with the statutes governing the Systems. Expenses are recognized when the liability is incurred, regardless of when payment is made. Administrative expenses are funded through investment earnings.

**Cash** – Cash includes cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

**Receivables** – Receivables consist primarily of contributions owed and yet to be remitted by employers, pending investment trades and interest and dividends payable to the Systems as of the end of each fiscal year.

Method Used to Value Investments — Investments are reported at fair value on a trade date basis. Securities traded on national and international exchanges are valued at the last reported sales price at current exchange rates. Fixed income securities not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. The value of real estate investments are based on estimated current values and independent appraisals. The value of private equity investments that do not have an established market are determined based upon the most current net asset values and activities through year end. When not readily available, alternative investments are valued based on a good faith determination by the general partner.

Capital Assets – The building and other capital assets are owned by PSRS and are stated at cost less depreciation accumulated since acquisition. The stated value does not purport to represent replacement or realized value. Costs of major additions and improvements are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from three to 40 years in the following major classes: computers and software, three years; vehicles, five years; equipment, five years; building and land improvements, 15 years; building, 40 years.

PSRS allocates depreciation expense to PEERS for the use of capital assets.

**Estimates** – The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of net assets held in trust for pension benefits at June 30, 2013. Actual results could differ from those estimates.

**Total Columns:** The financial statements include total column information for the prior year. Such information does not include sufficient detail to constitute a presentation in conformity with U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with both Systems' financial statements for the year ended June 30, 2012, from which the information was derived.

## Note 3 - Designations of Net Position - Restricted for Pension Benefits

The Systems designate the net position - restricted for pension benefits for the following specific purposes:

## Public School Retirement System of Missouri

	2013	2012
<b>Designated for Members' Contributions (Member Reserves)</b> – Accumulation of active and terminated member contributions plus interest.	\$ 6,857,442,716	\$ 6,687,357,639
<b>Designated for the Payment of Benefits to Present Retirees</b> – Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves to fund the System's obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	22,328,328,303	21,190,467,861
<b>Designated for Additional Deposit Annuities</b> – Accumulation of the additional deposits over and above the contributions required by law. Defined contribution annuity payments are made to current retirees from this reserve.	466,586	564,439
Designated for Operating Expenses/Benefits to Future Retirees (Operating Reserves/Deficit) – Accumulation of employer contributions and investment income used to fund future benefit payments, interest on member accounts and administration and maintenance expenses of the System.	1,189,179,188	(61,617,378)
Net Position – Restricted For Pension Benefits	\$30,375,416,793	\$27,816,772,561

## Public Education Employee Retirement System of Missouri

	2013	2012
<b>Designated for Members' Contributions (Member Reserves)</b> – Accumulation of active and terminated member contributions plus interest.	\$ 863,276,741	\$ 822,485,225
Designated for the Payment of Benefits to Present Retirees – Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves to fund the System's obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	1,653,613,287	1,541,541,277
Designated for Operating Expenses/Benefits to Future Retirees (Operating Reserves) – Accumulation of employer contributions and investment income used to fund future benefit payments, interest on member accounts and administration and maintenance expenses of the System.	799,622,768	600,530,535
Net Position – Restricted For Pension Benefits	\$ 3,316,512,796	\$ 2,964,557,037

## Note 4 – Deposits, Investments and Securities Lending Program

## **Custodial Credit Risk**

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Systems will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Systems would not be able to recover the value of investment or collateral securities that are in the possession of an outside party. To mitigate custodial credit risk, the Systems require that all deposits be 100% collateralized with securities held in the Systems' name and held by a third-party agent.

**Deposits** – Cash balances include short-term securities held by the custodial bank in a pooled short-term investment fund and operating balances held by the depository banks.

At June 30, 2013, the PSRS carrying amount of deposits at the depository bank was \$10,018,000 and the bank balance was \$11,367,701. Of the bank balance, \$250,000 was covered by federal depository insurance. In addition, the deposits were collateralized with U.S. agency securities held by a third-party institution in the System's name, totaling \$11,869,361. An additional \$7,561,089 was held in overnight repurchase agreements with a book value of \$7,561,089. The overnight repurchase agreements were collateralized with U.S. agency securities held by a third-party institution in the System's name totaling \$7,561,089.

At June 30, 2013, the PEERS carrying amount of deposits at the depository bank was (\$413,660) and the bank balance was \$0. Since the bank balance was \$0, no amount was required to be collateralized. To maximize investment income, the float caused by outstanding checks was invested in overnight repurchase agreements, thus causing the negative book balance. The overnight repurchase agreement balance at June 30, 2013 was \$1,576,095 with a book value of \$1,576,095. The overnight repurchase agreements were collateralized with U.S. agency securities held by a third-party institution in the System's name totaling \$1,655,591.

Investments – Funds for both Systems that are in excess of a safe operating balance are invested under policies and procedures established by the Board of Trustees. Chapter 169.040 RSMo as amended effective August 13, 1984, authorizes any investment which a prudent person acting in a like capacity and familiar with similar matters would use in the conduct of an enterprise of a like character and with like aims. Any person with fiduciary responsibility with respect to the Systems is covered by this "prudent person" rule.

## Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the Systems' investment in a single issue. To mitigate this risk, the Systems' investment policy prohibits investing more than 5% of the total investment portfolio into any single financial institution or issuer, excluding U.S. government securities. At June 30, 2013, the Systems did not have more than 5% of total investments in a single issue except for U.S. government securities.

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Systems do not have a single investment policy that restricts duration as a means of managing its exposure to fair value losses arising from increased interest rates; however, each manager must follow guidelines established relative to the duration of its benchmark. The portfolios are continually monitored to ensure compliance with these guidelines. The following tables include collateral pledged for deposits and repurchase agreements and securities lending collateral. The maturities of all debt securities are presented on the following page.

## Public School Retirement System of Missouri

Security Type	Fair Value at June 30, 2013	< 1 year to maturity	1 to 5 years to maturity	6 to 10 years to maturity	over 10 years to maturity
U.S. treasuries	\$6,472,396,138	\$ 2,698,632,446	\$ 1,969,970,578	\$1,158,475,231	\$ 645,317,883
Government guaranteed mortgage	s 9,750,065	-	663,431	4,846,171	4,240,463
Agencies	175,270,278	-	13,068,212	20,569,827	141,632,239
Collateralized mortgage obligation	s 23,505,332	-	-	-	23,505,332
Commercial mortgage backed secu	rities 28,747,873	-	-	5,480,515	23,267,358
Asset backed securities	10,823,855	-	-	2,323,764	8,500,091
Corporate bonds	1,350,216,769	34,798,883	413,994,397	823,811,897	77,611,592
Sovereign	45,993,727	17,615,986	5,989,943	16,112,582	6,275,216
Repurchase agreements	63,294,221	63,294,221	-	-	-
Commercial paper	66,718,789	66,718,789	-	-	-
Certificate of deposit	72,783,692	72,783,692	-	-	-
Time deposits	67,394,321	67,394,321	-	-	-
Derivatives	4,456,448	(2,300,071)	(1,931,099)	3,754,046	4,933,572
Municipals	38,750,994	-	1,198,782	379,059	37,173,153
Commingled Funds (see note)					
JPM STIF	467,364,667	467,364,667	-	-	-
BlackRock TempFund	16,174,637	16,174,637	-	_	-
Fidelity Select	16,174,637	16,174,637	-	-	-
Barclays Capital	104,000	104,000	-	_	-
PIMCO Developing Markets	225,085,193	225,085,193	-	-	-
PIMCO Short Term Floating NA	AV II 170,606,567	170,606,567	-	-	-
Currency	14,255,885	14,255,885	-	-	-
Total	\$9,339,868,088	\$ 3,928,703,853	\$ 2,402,954,244	\$2,035,753,092	\$ 972,456,899
Percentage of Total Fixed Income	100%	42%	26%	22%	10%

## Public Education Employee Retirement System of Missouri

Security Type	Fair Value at June 30, 2013	< 1 year to maturity	1 to 5 years to maturity	6 to 10 years to maturity	over 10 years to maturity
U.S. treasuries	\$ 773,409,536	\$ 332,363,392	\$ 223,812,879	\$ 135,767,658	\$ 81,465,607
Agencies	19,220,594	-	3,237,416	2,090,418	13,892,760
Collateralized mortgage obligations	4,565,287	-	-	-	4,565,287
Commercial mortgage backed securit	ties 1,094,370	-	-	-	1,094,370
Asset backed securities	1,618,634	-	559,065	390,600	668,969
Corporate bonds	145,351,481	4,165,151	45,031,123	88,049,292	8,105,915
Sovereign	4,489,873	1,603,207	719,353	1,041,599	1,125,714
Repurchase agreements	7,142,969	7,142,969	-	-	-
Commercial paper	7,529,443	7,529,443	-	-	-
Certificate of deposit	8,213,888	8,213,888	-	-	-
Time deposits	7,605,679	7,605,679	-	-	-
Derivatives	499,814	(150,468)	(260,275)	442,006	468,551
Municipals	5,844,932	-	61,251	301,212	5,482,469
Commingled Funds (see note)					
JPM STIF	64,928,895	64,928,895	-	-	-
BlackRock TempFund	1,825,363	1,825,363	-	-	-
Fidelity Select	1,825,363	1,825,363	-	-	-
Barclays Capital	82,000	82,000	-	-	-
PIMCO International Sector Fun	nd 122,396	-	-	122,396	-
PIMCO Developing Markets	25,009,467	25,009,467	-	-	-
Currency	1,189,767	1,189,767	-	-	-
Total	\$1,081,569,751	\$ 463,334,116	\$ 273,160,812	\$ 228,205,181	\$ 116,869,642
Percentage of Total Fixed Income	100%	43%	25%	21%	11%

**Note:** Commingled Funds are presented at the weighted average maturity. These funds do not have a single maturity date; however, the underlying securities have maturity dates. To more accurately reflect the interest rate risk of the Systems, these weighted averages are displayed.

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Systems do not have a single investment policy designating the minimum allowable credit rating; however, each manager must follow guidelines established specifically for its managed portfolio. The portfolios are continually monitored to ensure compliance with these guidelines. The following tables include collateral pledged for deposits and repurchase agreements and securities lending collateral. The Systems' debt investments by credit rating category as of June 30, 2013 are presented in the following tables.

Public School Retirement System of Missouri

Security Type	Fair Value at June 30, 2013	%	AAA	AA	A	BBB	BB	В	CCC	Not Rated
U.S. treasuries	\$6,472,396,138	70%	\$6,421,874,745	\$ -	\$50,521,393	\$ -	\$ -	\$ -	\$ -	\$ -
Government guaranteed mortgages	9,750,065	0%	-	9,750,065	-	-	-	-	-	-
Agencies	175,270,278	2%	-	175,270,278	-	-	-	-	-	-
Collateralized mortgage obligations	23,505,332	0%	1,437,570	1,091,211	7,151,575	700,287	-	3,407,119	9,461,917	255,653
Commercial mortgage- backed securities	28,747,873	0%	10,879,575	13,601,708	3,475,349	791,241	-	-	-	-
Asset backed securities	10,823,855	0%	3,071,198	165,827	580,388	5,439,570	-	448,035	1,118,837	-
Corporate bonds	1,350,216,769	15%	13,164,004	69,269,268	445,517,829	443,389,834	149,033,462	202,798,653	5,112,525	21,931,194
Sovereign	45,993,727	0%	6,131,831	20,979,076	5,886,087	11,091,733	445,000	1,460,000	-	-
Repurchase agreements	63,294,221	1%	63,294,221	-	-	-	-	-	-	-
Commercial paper	66,718,789	1%	66,718,789	-	-	-	-	-	-	-
Certificates of deposit	72,783,692	1%	72,783,692	-	-	-	-	-	-	-
Time deposits	67,394,321	1%	67,394,321	-	-	-	-	-	-	-
Derivatives	4,456,448	0%	-	-	-	-	-	-	-	4,456,448
Municipals	38,750,994	0%	2,685,195	13,219,914	19,858,969	212,964	119,803	2,654,149	-	-
Commingled Funds (se	e note)									
JPM STIF	467,364,667	5%	467,364,667	-	-	-	-	-	-	-
BlackRock TempFund	16,174,637	0%	16,174,637	-	-	-	-	-	-	-
Fidelity Select	16,174,637	0%	16,174,637	-	-	-	-	-	-	-
Barclays Capital	104,000	0%	-	-	104,000	-	-	-	-	-
PIMCO Developing Markets	225,085,193	2%	-	-	225,085,193	-	-	-	-	-
PIMCO Short Term Floating NAV II	170,606,567	2%	-	170,606,567	-	-	-	-	-	-
Currency	14,255,885	0%	-	-	-	-	-	_	-	14,255,885
Total	\$ 9,339,868,088	100%	\$7,229,149,082	\$473,953,914	\$758,180,783	\$461,625,629	\$149,598,265	\$210,767,956	\$15,693,279	\$40,899,180
Percentage of Total Fixed Income	100%		77%	5%	8%	5%	2%	2%	0%	1%

Note: Commingled Funds are presented at the weighted average credit quality. These funds do not carry a rating in and of themselves; however, the underlying securities are all rated. To more accurately reflect the credit risk of the Systems, these weighted averages are displayed. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not required to be disclosed; however, we feel it shows a more true picture of our fixed income holdings.

Public Education Employee Retirement System of Missouri

Security Type	Fair Value at June 30, 2013	%	AAA	AA	A	BBB	ВВ	В	CCC	Not Rated
U.S. treasuries	\$773,409,536	72%	\$773,409,536	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Agencies	19,220,594	2%	-	19,220,594	-	-	-	-	-	-
Collateralized mortgage obligations	4,565,287	0%	505,170	19,282	2,063,575	200,693	118,992	379,249	1,272,765	5,561
Commercial mortgage- backed securities	1,094,370	0%	756,132	-	338,238	-	-	-	-	-
Asset backed securities	1,618,634	0%	75,413	842,139	492,542	204,481	-	-	4,059	-
Corporate bonds	145,351,481	13%	1,766,532	7,745,245	48,840,419	47,858,295	16,606,386	20,686,317	832,075	1,016,212
Sovereign	4,489,873	0%	452,272	2,263,414	405,148	396,312	767,102	205,625	-	-
Repurchase agreements	7,142,969	1%	7,142,969	-	-	-	-	-	-	-
Commercial paper	7,529,443	1%	7,529,443	-	-	-	-	-	-	-
Certificates of deposit	8,213,888	1%	8,213,888	-	-	-	-	-	-	-
Time deposits	7,605,679	1%	7,605,679	-	-	-	-	-	-	-
Derivatives	499,814	0%	-	-	-	-	-	-	-	499,814
Municipals	5,844,932	1%	467,047	3,831,555	1,228,004	-	-	318,326	-	-
Commingled Funds (see	e note)									
JPM STIF	64,928,895	6%	64,928,895	-	-	-	-	-	-	-
BlackRock TempFund	1,825,363	0%	1,825,363	-	-	-	-	-	-	-
Fidelity Select	1,825,363	0%	1,825,363	-	-	-	-	-	-	-
Barclays Capital	82,000	0%	-	-	82,000	-	-	-	-	-
PIMCO International Sector Fund	122,396	0%	122,396	-	-	-	-	-	-	-
PIMCO Developing Markets	25,009,467	2%	-	-	25,009,467	-	-	-	-	-
Currency	1,189,767	0%	-	-	-	-	-	-	-	1,189,767
Total	\$1,081,569,751	100%	\$ 876,626,098	\$ 33,922,229	\$78,459,393	\$48,659,781	\$ 17,492,480	\$21,589,517	\$2,108,899	\$ 2,711,354
Percentage of Total Fixed Income	100%		81%	3%	7%	5%	2%	2%	0%	0%

Note: Commingled Funds are presented at the weighted average credit quality. These funds do not carry a rating in and of themselves; however, the underlying securities are all rated. To more accurately reflect the credit risk of the Systems, these weighted averages are displayed. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not required to be disclosed; however, we feel it shows a more true picture of our fixed income holdings.

## Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Systems do not have a single investment policy designating the allowable exposure to foreign currency. However, each manager must follow guidelines established specifically for its managed portfolio. The portfolios are continually monitored to ensure compliance with these guidelines. The Systems' exposure to foreign currency risk as of June 30, 2013 is presented on the following tables.

Public School Retirement System of Missouri

Currency	Debt	Equity	Currency/Short Term	Total
Australian Dollar	\$ 4,380,494	\$ 103,650,044	\$ 1,244,253	\$ 109,274,791
Brazilian Real	(1,483,958)	34,973,031	919,496	34,408,569
British Pound Sterling	30,236,827	330,320,029	9,603,492	370,160,348
Canadian Dollar	5,921,965	138,010,403	599,643	144,532,011
Chilean Peso	-	6,453,143	122,788	6,575,931
Colombian Peso	-	149,772	1,130	150,902
Czech Koruna	-	3,881,190	(5,121)	3,876,069
Danish Krone	-	15,745,077	213,288	15,958,365
Egyptian Pound	-	396,830	20,360	417,190
Euro Currency	84,251,662	672,812,990	5,984,409	763,049,061
Hong Kong Dollar	-	117,273,843	431,976	117,705,819
Hungarian Forint	-	978,595	2,833	981,428
Indian Rupee	-	29,285,556	340,157	29,625,713
Indonesian Rupiah	1,313,164	9,674,284	1,596,578	12,584,026
Israeli Shekel	-	1,213,080	38,754	1,251,834
Japanese Yen	(26)	373,926,993	1,662,391	375,589,358
Malaysian Ringgit	-	23,476,347	351,026	23,827,373
Mexican Peso	4,246,692	17,589,956	254,332	22,090,980
Moroccan Dirham	-	428,237	22,802	451,039
New Taiwan Dollar	-	39,347,738	142,207	39,489,945
New Turkish Lira	-	13,805,125	237,310	14,042,435
New Zealand Dollar	-	8,056,109	(324)	8,055,785
Norwegian Krone	-	9,385,660	(423,896)	8,961,764
Pakistan Rupee	-	-	47,757	47,757
Peruvian Nuevo Sol	-	-	654	654
Philippine Peso	-	4,774,401	28,616	4,803,017
Polish Zloty	-	5,553,473	(139,468)	5,414,005
Russian Ruble	-	-	178,233	178,233
Singapore Dollar	-	26,616,347	231,402	26,847,749
South African Rand	346,375	37,141,304	615,946	38,103,625
South Korean Won	-	74,565,405	422,382	74,987,787
Swedish Krona	-	22,363,978	485,822	22,849,800
Swiss Franc	3,390,298	116,145,340	(187)	119,535,451
Thailand Baht	-	17,083,048	120,182	17,203,230
Ukraine Hryvnia	-	7	-	7
Yuan Renminbi		 239,629		239,629
Total	\$ 132,603,493	\$ 2,255,316,964	\$ 25,351,223	\$ 2,413,271,680

Public Education Employee Retirement System of Missouri

Currency	Debt	Equity	Currency/Short Term	Total
Australian Dollar	\$ 370,167	\$ 11,650,440	\$ 118,862	\$ 12,139,469
Brazilian Real	(198,541)	3,245,495	112,972	3,159,926
British Pound Sterling	156,978	35,327,515	605,840	36,090,333
Canadian Dollar	684,726	15,603,538	73,089	16,361,353
Chilean Peso	-	881,554	11,115	892,669
Colombian Peso	-	14,515	110	14,625
Czech Koruna	-	397,670	(1,891)	395,779
Danish Krone	-	1,802,409	22,376	1,824,785
Egyptian Pound	-	50,349	4,602	54,951
Euro Currency	1,920,503	67,817,460	866,533	70,604,496
Hong Kong Dollar	-	12,775,577	95,680	12,871,257
Hungarian Forint	-	153,865	(2,864)	151,001
Indian Rupee	-	3,191,114	38,708	3,229,822
Indonesian Rupiah	161,090	891,570	175,875	1,228,535
Israeli Shekel	-	127,042	5,421	132,463
Japanese Yen	(3)	40,345,413	300,087	40,645,497
Malaysian Ringgit	-	2,605,144	56,535	2,661,679
Mexican Peso	167,056	2,561,249	25,841	2,754,146
Moroccan Dirham	-	51,276	1,466	52,742
New Taiwan Dollar	-	4,109,369	16,602	4,125,971
New Turkish Lira	-	1,615,474	43,875	1,659,349
New Zealand Dollar	-	965,042	(33)	965,009
Norwegian Krone	-	979,870	(45,981)	933,889
Pakistan Rupee	-	-	3,023	3,023
Peruvian Nuevo Sol	-	-	6	6
Philippine Peso	-	471,380	11,346	482,726
Polish Zloty	-	829,124	(11,573)	817,551
Russian Ruble	-	-	19,343	19,343
Singapore Dollar	-	2,998,962	11,238	3,010,200
South African Rand	41,985	4,034,013	250,844	4,326,842
South Korean Won	-	8,104,202	95,306	8,199,508
Swedish Krona	-	2,644,182	48,683	2,692,865
Swiss Franc	-	12,130,319	62,347	12,192,666
Thailand Baht	-	1,814,322	33,524	1,847,846
Ukraine Hryvnia	-	1	9	10
Yuan Renminbi	-	45,671	2	45,673
Total	\$ 3,303,961	\$ 240,235,126	\$ 3,048,918	\$ 246,588,005

**Derivatives** – Derivatives are generally defined as investment instruments whose cash flows or fair values are derived from the value of some other asset or index. The Systems are parties to derivatives which have off-balance sheet risk. These derivative instruments are used in the normal course of business to generate earnings and reduce exposure to fluctuations in market conditions. The Systems are exposed to various types of credit, market and legal risk related to these investments. Investment staff monitors these types of investments with extreme care and is not aware of any undue risks at this time. All derivatives are considered investments. Derivatives are reported at fair value on the Statements of Plan Net Position based on quoted market prices when available. In the instances that quoted market prices are unavailable, pricing is obtained via independent pricing sources.

The fair value balances and notional amounts of derivative instruments outstanding as of June 30, 2013, classified by type are as follows:

Public School Retirement System of Missouri

	Fair Value at June			
Investment Derivatives	Classification	Amount	Notional	
Swaps				
Receive-fixed interest rate swap	Investments, at fair value	\$ 8,118,059	\$ 446,500,000	
Credit default swaps	Investments, at fair value	(688,727)	143,821,748	
Total return swaps - equity	Investments, at fair value	(12,348,001)	3,009,249,678	
Total swaps		(4,918,669)	3,599,571,426	
Futures				
Equity futures long	Investments, at fair value	-	84,493,284	
Equity futures short	Investments, at fair value	-	42,848,445	
Treasury futures long	Investments, at fair value	-	3,265,312,500	
Currency futures short	Investments, at fair value	-	5,426,545	
Currency futures long	Investments, at fair value	-	286,258,983	
Commodity futures long	Investments, at fair value		12,848,850	
Total futures		-	3,697,188,607	
Options				
Equity written put options	Investments, at fair value	(12,556)	8,600	
Equity purchased put options	Investments, at fair value	36,792	25,200	
Treasury futures written call options	Investments, at fair value	(1,344)	4,300,000	
Treasury futures written put options	Investments, at fair value	(120,266)	4,300,000	
Fixed income written call options	Investments, at fair value	(20,985)	4,500,000	
Fixed income written put options	Investments, at fair value	(5,471)	3,400,000	
Swaptions	Investments, at fair value	(1,928,681)	237,800,000	
Total options		(2,052,511)	254,333,800	
Foreign currency forwards net receivable/payable	Investment Sales and Purchases	(981,043)		
Total Investment Derivatives		\$ (7,952,223)	\$ 7,551,093,833	

Public Education Employee Retirement System of Missouri

Investment Derivatives	Classification	Amount	Notional
Swaps			
Receive-fixed interest rate swap	Investments, at fair value	\$ 822,706	\$ 53,800,000
Credit default swaps	Investments, at fair value	(86,318)	16,222,900
Total return swaps - equity	Investments, at fair value	(2,061,408)	336,603,298
Total swaps		(1,325,020)	406,626,198
Futures			
Equity futures long	Investments, at fair value	-	9,432,044
Equity futures short	Investments, at fair value	-	4,826,587
Treasury futures long	Investments, at fair value	-	215,156,250
Currency futures short	Investments, at fair value	-	2,281,844
Currency futures long	Investments, at fair value	-	28,365,063
Commodity futures long	Investments, at fair value	-	1,468,440
Total futures		-	261,530,228
Options			
Equity written put options	Investments, at fair value	(1,314)	900
Equity purchased put options	Investments, at fair value	4,088	2,800
Treasury futures written call options	Investments, at fair value	(188)	600,000
Treasury futures written put options	Investments, at fair value	(2,156)	600,000
Fixed income written call options	Investments, at fair value	(1,156)	300,000
Fixed income written put options	Investments, at fair value	(657)	400,000
Swaptions	Investments, at fair value	(234,320)	30,000,000
Total options		(235,703)	31,903,700
Foreign currency forwards net receivable/payable	Investment Sales and Purchases	(78,873)	
Total Investment Derivatives		\$ (1,639,596)	\$ 700,060,126

Swaps - The Systems' investment managers have entered into various swaps including interest rate swaps, credit default swaps and equity and total return swaps. Swaps represent an agreement between two parties to exchange sequences of cash flows over a period in the future. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty who, in turn, agrees to make return interest payments that float with some reference rate. A credit default swap is a contract whereby the credit risk associated with an investment is transferred by entering into an agreement with another party, who in exchange for periodic fees, agrees to make payments in the event of a default or other predetermined credit event. A total return swap is a contract in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of the underlying asset. The underlying asset is typically an index, bond, etc. Gains and losses on swaps are determined based on market values and are recorded in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Plan Net Position. Net losses on swaps of \$5.3 million for PSRS and \$1.2 million for PEERS were recognized for the fiscal year ended June 30, 2013.

Futures - Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specified price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the Systems' credit risk. The net change in the value of futures contracts is settled daily in cash with the exchanges. Net gains or losses resulting from the daily settlements are included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Plan Net Position. PSRS and PEERS recognized net losses on futures contracts of \$14.1 million and \$1.4 million, respectively, during the fiscal year ended June 30, 2013.

**Options** - Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. The option's price is usually a small percentage of the underlying asset's value. As a writer of financial options, the Systems' investment managers receive a premium at the outset of the agreement and bear the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the Systems' investment managers pay a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. Net gains or losses resulting from such obligations are included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Plan Net Position. PSRS and PEERS recognized net losses on option contracts of \$1.2 million and \$114,900, respectively, during the fiscal year ended June 30, 2013.

*Currency forwards* - Currency forwards represent forward foreign exchange contracts that are entered into in order to hedge the exposure to changes in foreign currency rate on the foreign currency dominated portfolio holdings. A forward foreign exchange contract is a

commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Plan Net Position. PSRS recognized net gains on such contracts of \$13.2 million and PEERS recognized net gains of \$1.0 million, during the fiscal year ended June 30, 2013.

**Derivative Risk** - Derivatives that are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk.

At June 30, 2013 the counterparties' credit ratings for currency forwards, options and swaps are subject to credit risk as shown on the chart below.

The Systems are exposed to interest rate risk on their interest rate swaps. As the variable portion of the swaps move in the market, the Systems' exposure increases and decreases. The Systems are exposed to termination risk. The Systems' investment managers or their counterparties may terminate a derivative if the either party fails to perform under the terms of the contract.

The Systems' derivatives are governed by ISDA Master Agreements between the Systems and the counterparties. These agreements set forth collateral requirements and applicable netting arrangements. Foreign currency risks are reflected on pages 30 and 31.

The Systems could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. The Systems' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. The Systems anticipate that the counterparties will be able to satisfy their obligations under the contracts.

Derivative Counterparty Credit Ratings								
Public School Retirement System of Missouri								
Quality Rating	Swaps	Options	Forwards	Total				
AA	\$ 7,429,332	\$ (2,076,747)	\$ 102,229	\$ 5,454,814				
A	(12,348,001)	24,236	(1,083,270)	(13,407,035)				
Total subject to credit risk	\$ (4,918,669)	\$ (2,052,511)	\$ (981,041)	\$ (7,952,221)				
Public Education Employee Reti	rement System of Missour	i						
Quality Rating	Swaps	Options	Forwards	Total				
AA	\$ 736,388	\$ (238,477)	\$ 13,301	\$ 511,212				
A	(2,061,408)	2,774	(92,174)	(2,150,808)				
Total subject to credit risk	\$ (1,325,020)	\$ (235,703)	\$ (78,873)	\$ (1,639,596)				

The derivative financial instruments discussed involve, to varying degrees, elements of market risk to the extent of future market movements in excess of the amounts recognized in the Statements of Plan Net Position. Market risk arises from the potential unfavorable change in the value of the underlying instruments. The contract or notional amounts of these instruments reflect the extent of the Systems' involvement in each class of financial instrument; however, these amounts do not represent the exposure to market loss. Additional derivatives may be held in limited partnerships and commingled funds that are not reflected on the chart on page 34.

Security Lending Activity - Under the "prudent person" authority of the governing statutes and in accordance with the policies set by the Board of Trustees, the Systems lend securities to broker-dealers and banks pursuant to a form of loan agreement. The Systems' custodial bank is authorized to act as the Systems' agent to lend available securities to approved broker-dealers and banks subject to the receipt of acceptable collateral.

During the fiscal year, the Systems' custodial bank lent, on behalf of the Systems, securities to participating broker-dealers. The broker-dealers must provide collateral in the form of cash. The Systems did not impose restrictions during the fiscal year on the amount of loans that the custodial bank made on their behalf.

Borrowers were required to deliver collateral for each loan equal to: (1) in the case of loaned securities denominated in U.S. dollars or whose primary trading market was located in the United States, or sovereign debt issued by foreign governments, 102% of the fair value of the loaned securities, and (2) in the case of loaned securities not denominated in U.S. dollars or whose primary trading market was not located in the United States, 105% of the fair value of the loaned securities.

Pursuant to the lending agreement, the custodial bank has an obligation to provide a form of indemnification to the Systems in the event of default by a borrower. There were no violations of the contractual provisions nor were there any borrower or lending agent default losses during the fiscal year.

The market value of securities on loan as of June 30, 2013 was \$418,219,380 for PSRS and \$47,346,482 for PEERS. On June 30, 2013, the Systems had no credit risk exposure to borrowers as the cash and securities collateral amounts received exceeded amounts on loan. Loans are generally terminable on demand. However, with the prior approval of the Systems, loans may be made on the basis of a specified termination date, with or without providing for the right of the Systems to terminate or substitute equivalent securities. As of June 30, 2013, there were no term loans for either PSRS or PEERS.

PSRS and PEERS maintained investment portfolios that were novated to JPMorgan Chase, NA from the Systems' previous agent lender and custodial bank. These assets were referred to as the Legacy Portfolio. The Legacy Portfolio was fully liquidated during the current year.

New cash collateral is invested in separately managed accounts in accordance with the investment guidelines approved by the Systems. Assets purchased with new cash collateral are referred to as the J.P. Morgan Portfolio. The primary investment objective of the J.P. Morgan Portfolio is the preservation of principal. As of June 30, 2013, the cost basis of the J.P. Morgan Portfolio totaled \$433,979,783 for PSRS and \$48,976,102 for PEERS. The estimated market value of the J.P. Morgan Portfolio totaled \$433,989,546 for PSRS and \$48,977,204 for PEERS.

PSRS recognized net appreciation of \$14,044,758 and PEERS recognized net appreciation of \$1,202,970 for the year ended June 30, 2013 on the invested collateral accounts. Such is reported as net appreciation in fair value of security lending collateral on the Statements of Changes in Plan Net Position.

The weighted average duration of invested collateral as of June 30, 2013 was 29 days and an average final maturity of approximately 31 days for PSRS and PEERS. Because the loans were terminable at will, their duration did not match the duration of the investments made with cash collateral.

## Note 5 - Additional Deposits Program

Section 169.035, RSMo provides for an additional deposits program for PSRS members. Members may make payments above the required defined benefit contribution amount to the System in order to provide a monthly annuity at retirement based on the total of the deposits and interest.

This annuity is in addition to the defined benefit allowance provided by the System. Contributions to the program are tax-sheltered. As of September 1, 1996 new deposits to the program were limited to members currently with deposits in the program. No additional deposits were made during 2012-2013.

The deposits to the program are included in the investment program of the PSRS defined benefit plan. The additional deposits program's basis of accounting and the asset valuation are identical to the defined benefit plan.

## Note 6 - Schedule of Funded Status and Funding Progress

The funded status of the Systems as of June 30, 2013, the most recent actuarial valuation date, is as follows:

(Dollar a	mounts in thousana	ds)					
	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)– Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
<b>PSRS</b>	6/30/13	\$ 29,443,147	\$ 36,758,165	\$ 7,315,018	80.1%	\$ 4,460,872	164.0%
PEERS	6/30/13	\$ 3,237,200	\$ 3,967,619	\$ 730,419	81.6%	\$ 1,470,830	49.7%

The Schedule of Funding Progress, presented as required supplementary information (RSI) following the Notes to the Financial Statements, presents multi-year trend information about whether the actuarial value of plan net assets is increasing or decreasing over time relative to the AAL for benefits.

#### Additional Information as of the Latest Actuarial Valuation is as Follows:

Valuation date	June 30, 2013
Actuarial cost method	Entry Age Normal
Amortization method	
PSRS (1)	Closed, level percent for 30 years, effective June 30, 2011
	Open, level percent for 30 years, prior to June 30, 2011
PEERS (2)	Closed, level percent for 30 years, effective June 30, 2011
	Open, level percent for 30 years, prior to June 30, 2011
Asset valuation method	Five-year smoothing of actual returns less expected returns
	Marked to market June 30, 2003
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases*	
PSRS	4.0 - 10.0%, effective June 30, 2011
	5.0 - 10.25%, prior to June 30, 2011
PEERS	5.0 - 12.0%, effective June 30, 2011
	5.0 - 10.0%, prior to June 30, 2011
*Includes inflation at	2.5%, effective June 30, 2011
morades matron at	3.25%, prior to June 30, 2011
	* · · ·
Cost-of-living adjustments	2.0%, effective June 30, 2011
	3.25%, prior to June 30, 2011

<sup>(1)</sup> The annual statutory increase in the total contribution rate may not exceed 1% of retirement salary. Contribution rates will be established in accordance with the Board of Trustee's Funding Stabilization policy and the recommendation of the independent actuary. The recommended contribution rate for fiscal year 2015 is 29.0%, which results in an effective amortization period of 29.4 years.

<sup>(2)</sup> The annual statutory increase in the total contribution rate may not exceed 0.5% of retirement salary. Contribution rates will be established in accordance with the Board of Trustee's Funding Stabilization policy and the recommendation of the independent actuary. The recommended contribution rate for fiscal year 2015 is 13.72%, which results in an effective amortization period of 31.0 years.

#### Note 7 - Retirement Plans

## Section 401(a) Defined Benefit Plan

All full-time System employees holding valid Missouri educator certificates are covered by PSRS. All other eligible employees are members of PEERS. Both Systems provide retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Chapter 169 RSMo contains the statutory provisions of both Systems.

PSRS members were required to contribute 14.5% of their annual covered salary during fiscal years 2013 and 2012 and 14.0% during fiscal year 2011. PSRS, as the employer, was required to contribute an equal amount. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions set in Section 169.030 RSMo. Employer contributions to PSRS totaled \$30,474 for the 2013 fiscal year, \$34,722 for the 2012 fiscal year and \$31,319 for the 2011 fiscal year. The amounts for these years are equal to the required contributions.

PEERS members were required to contribute 6.86% of their annual covered salary during fiscal years 2013 and 2012 and 6.63% during fiscal year 2011. PSRS, as the employer, was required to contribute an equal amount. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions in Section 169.620 RSMo. Employer contributions to PEERS totaled \$595,935 for the 2013 fiscal year, \$555,144 for the 2012 fiscal year and \$519,055 for the 2011 fiscal year. The amounts for these years are equal to the required contributions.

## Section 457 Deferred Compensation Plan

A voluntary Section 457 deferred compensation plan is administered to provide additional retirement benefits for employees. The plan provides for employer-matching contributions up to a set maximum. The total contributions are subject to the limitations established in IRC Section 457. The Board of Trustees has authority to establish the employer contribution levels. For most employees, the System will match \$50 plus 0.52% of salary per month. For certain employees, the System will make employer-paid contributions of \$17,000 per year plus \$5,500 in catch up contributions, if eligible. This is governed by individual employment contracts as approved by the Board of Trustees.

All employees immediately vest in the employer-matching and employer-paid contributions. Employer-matching contributions totaled \$96,746 for the 2013 fiscal year and \$93,829 for the 2012 fiscal year. Employer-paid contributions totaled \$56,500 for fiscal year 2013 and \$51,500 for fiscal year 2012. Employee contributions totaled \$299,784 for the 2013 fiscal year and \$235,887 for the 2012 fiscal year.

Maintenance of individual member accounts and custody of assets have been contracted to a third-party administrator and investment custodian. Total contributions are sent directly to the third-party administrator by the employer. Employees can self-direct investments of their contributions and their respective share of matching contributions in a number of investment options. Because the System does not hold the plan's assets and does not have significant administrative responsibilities, the plan's assets and changes in net assets are not reported in the Systems' financial statements.

## Note 8 - Other Post-Employment Benefit Plans

Post-Employment Staff Retiree Healthcare Plan

**Plan Description and Funding Policy** – The Public School Retirement System of Missouri Staff Retiree Healthcare Program (SRHP) is a single-employer defined benefit other post-employment benefit (OPEB) plan administered by PSRS. SRHP provides a healthcare premium implicit rate subsidy to eligible staff retirees and their dependents provided they pay 100% of the blended healthcare premium. The blended healthcare premium is based on all active and retired employees. Retiree healthcare benefits are funded on a pay-as-yougo basis, with premiums determined annually. The PSRS/PEERS Board of Trustees determines the funding of benefits and any benefit amendments. There is no continuing obligation to provide benefits beyond each calendar year. SRHP does not issue a stand-alone public financial report.

Annual OPEB Cost and Net OPEB Obligation — PSRS' annual OPEB cost (expense) is calculated

based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of Governmental Accounting Standards Board (GASB) Statement 45. The ARC represents a level of funding that, if paid on

an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years.

PSRS' annual OPEB cost, the amount actually contributed to the plan and changes in the net OPEB obligation are as follows:

Annual required contribution	\$	305,300
Interest on net OPEB obligation		31,300
Amortization of net OPEB obligation		(30,800)
Annual OPEB cost		305,800
Contributions made		55,700
Increase in net OPEB obligation		250,100
Net OPEB obligation - beginning of year		949,200
Net OPEB obligation - end of year	\$ 1,	,199,300

PSRS' annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2013 and the two preceding years are as follows:

Fiscal Year Ended	Annual OPEB Cost (AOC)	% of AOC Contributed	Net OPEB Obligation
6/30/2011	\$ 245,400	15.7 %	\$ 752,900
6/30/2012	\$ 247,200	20.6 %	\$ 949,200
6/30/2013	\$ 305,800	18.2 %	\$ 1,199,300

Funded Status and Funding Progress - SRHP's funded status and funding progress are summarized below:

Actuarial	Actuarial	<b>Actuarial Accrued</b>	Unfunded	Funded	Covered	UAAL as a
Valuation	Value of	Liability (AAL)-	AAL (UAAL)	Ratio	Payroll	% of
Date	Assets (a)	(b)	(b - a)	(a/b)	(c)	Payroll ((b-a)/c)
6/30/2013	\$ -	\$3,192,700	\$3,192,700	0.0%	\$8,425,400	37.9%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and healthcare cost trends. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Method and Assumptions – Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the efforts of short–term volatility in actuarially accrued liabilities and the actuarial value of assets, consistent with the long-term perspectives of the calculations.

In the June 30, 2013 actuarial valuation, the following assumptions and methods were used:

Actuarial cost method Actuarial value of assets Amortization method Remaining amortization period

> Actuarial assumptions: Investment rate of return Wage inflation Healthcare trend

Entry Age Normal No Assets (pay-as-you-go) Level Percent Open 30 Years

3.3 % per year, 4.5 % per year for fiscal year 2011
3.5 % per year, 5.0 % per year for fiscal year 2011
7.5% in fiscal year 2013, decreasing by one-half percentage point per year to an ultimate of 4.5% in fiscal year 2019 and after

#### Post-Employment Health Plan

PSRS maintains a Post-Employment Health Plan ("PEHP") for employees. Upon termination, an employee will receive payment at the rate of one day of pay for each two days of accrued sick leave up to 100 days of accrued sick leave (50 days paid). Any days above 100 will be forfeited. All payments under the PEHP in excess of \$1,000 will be transferred into a PEHP account which can be used to pay health insurance premiums for the employee or dependent at any time in the future. If an employee is retiring, the payments can be transferred back to PSRS on a monthly basis to cover the cost of health insurance for the retiree. The amount paid into the PEHP was \$29,478 for four employees (two retirees and two terminations) during 2013 and \$25,653 for three employees (one retiree and two terminations) during 2012. The cost was charged 62% to PSRS and 38% to PEERS.

#### Note 9 - Risk Management

The Systems are exposed to various risks of loss related to natural disasters, errors and omissions, loss of assets, torts, etc. The Systems have chosen to cover such losses through the purchase of commercial insurance. There have been no material insurance claims filed or paid during the past three years.

The Systems have a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal operations.

#### Note 10 - Commitments and Contingencies

PSRS was committed to the future purchase of investments at a cost of \$4,329,286,136 on June 30, 2013 and PEERS had investment purchase commitments of \$451,099,920 on June 30, 2013.

PSRS had total unfunded capital commitments to real estate, private equity and other alternative investments of approximately \$1.8 billion as of June 30, 2013. PEERS had total unfunded capital commitments to real

estate, private equity and other alternative investments of approximately \$191.4 million as of June 30, 2013. The unfunded commitments are not recorded in the Statements of Plan Net Position.

During fiscal year 2010, PSRS entered into a contract with a consultant to provide and implement the software and training of an automated pension administration system at a cost of approximately \$16,000,000. As of June 30, 2013, \$12,983,287 had been paid pursuant to this contract.

As discussed in Note 4 – Deposits, Investments and Securities Lending Program, the System's custodial bank is authorized to act as the Systems' agent regarding security lending transactions. The required collateral is then invested in collective investment pools, which are governed by Trust agreements. The Systems and their previous custodial bank are in dispute regarding the terms of the Trust agreement for the Quality D Short-Term Investment Fund (Quality D Fund). The previous custodial bank believes the Trust Agreement provides them the ability to re-value the Systems' investments in the Quality D Fund based on a series of prior, System authorized, Custodial bank approved, redemptions. The Systems strongly contest such action. On October 14, 2009, the custodial bank revalued the Systems' investments in the Quality D Fund by reducing the value by approximately \$96 million. The Systems were then provided their revalued portion of the Quality D Fund as an in-kind distribution. The in-kind distribution was utilized to fund a customized collective investment pool to facilitate securities lending activity. The revaluation was based on net asset values as of October 13, 2009. The Systems strongly oppose such action and anticipate recovery of such amounts. The Systems filed a lawsuit in Cole County, Missouri Circuit Court against the custodial bank on September 18, 2009 in an attempt to prevent the custodial bank from taking such action. The Systems are proceeding with litigation to recover any amounts lost as a result of the custodial bank's action. The Systems terminated their custodial relationship with the previous custodian on October 1, 2010.

Certain other legal proceedings are pending with PSRS and PEERS arising from normal activities. Although unable to predict the outcome of these matters, the Systems believe the final outcome of these actions will not have a material adverse effect on the Systems' financial statements.

## Note 11 - Subsequent Event

The Board of Trustees of PSRS and PEERS approved the commingling of assets for purposes of investment and administration. In order to implement this change, PSRS

and PEERS adopted the Missouri Education Pension Trust Agreement. The Missouri Education Pension Trust is managed by the PSRS and PEERS Board of Trustees and investment staff. The Systems will gain efficiency and synergy by the commingling of assets into one entity.

In connection with the commingling of the assets, PSRS and PEERS each transferred all invested assets to the Missouri Education Pension Trust on July 1, 2013. PSRS and PEERS continue to own their respective share of the commingled invested assets.

# Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri

## Required Supplementary Information Schedules of Funding Progress

#### Public School Retirement System of Missouri

(Dollar amounts in thousands)

(Dollar amouni	ts in thousands)					
Actuarial	Actuarial	<b>Actuarial Accrued</b>	Unfunded	Funded	Covered	UAAL as a
Valuation	Value of	Liability (AAL)-	AAL (UAAL)	Ratio	Payroll	% of Covered
Date	Assets (a)	Entry Age (b)	(b - a)	(a/b)	(c)	Payroll ((b-a)/c)
6/30/08	\$ 28,751,241	\$ 34,490,452 1	\$ 5,739,211	83.4%	\$ 4,209,417	136.3%
6/30/09	28,826,075	36,060,121 1	7,234,046	79.9%	4,439,381	163.0%
6/30/10	28,931,331	37,233,602 1	8,302,271	77.7%	4,493,865	184.7%
6/30/11	29,387,486	34,383,430 <sup>3</sup>	4,995,944	85.5%	4,338,976	115.1%
6/30/12	29,013,002	35,588,030 1	6,575,028	81.5%	4,379,060	150.1%
6/30/13	29,443,147	36,758,165 <sup>2</sup>	7,315,018	80.1%	4,460,872	164.0%
0130113	27,143,147	50,7 50,105	/,517,010	00.1 /0	1, 100,072	104.070

<sup>&</sup>lt;sup>1</sup>There were no legislative changes in fiscal years 2008, 2009, 2010 and 2012.

#### Public Education Employee Retirement System of Missouri

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)– Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
		, ,		. ,		
6/30/08	\$ 2,703,762	\$ 3,278,602 1	\$ 574,840	82.5%	\$ 1,377,506	41.7%
6/30/09	2,792,182	3,458,044 1	665,862	80.7%	1,417,485	47.0%
6/30/10	2,892,411	3,658,713 1	766,302	79.1%	1,433,691	53.4%
6/30/11	3,028,757	3,549,348 <sup>3</sup>	520,591	85.3%	1,414,442	36.8%
6/30/12	3,090,880	3,746,347 1	655,467	82.5%	1,437,310	45.6%
6/30/13	3,237,200	3,967,619 2	730,419	81.6%	1,470,830	49.7%

<sup>&</sup>lt;sup>1</sup>There were no legislative changes in fiscal years 2008, 2009, 2010 and 2012.

<sup>&</sup>lt;sup>2</sup>The permanent extension of the 25-and-Out and the extension of the 2.55% provisions to 2014 are included in the AAL for fiscal year 2013.

<sup>&</sup>lt;sup>3</sup>There were no legislative changes in fiscal year 2011, however actuarial assumptions were revised.

<sup>&</sup>lt;sup>2</sup>The permanent extension of the 25-and-Out provision is included in the AAL for fiscal year 2013.

<sup>&</sup>lt;sup>3</sup>There were no legislative changes in fiscal year 2011, however actuarial assumptions were revised.

## Required Supplementary Information

Schedules of Employer Contributions

Public School Retirement System of Missouri

		Annual Required		34.4	
77 F 1 1	т 1	Contribution (ARC)	ъ.	Maximum	ъ.
Year Ended	Employer Contribution	per GASB Statement #25	Percentage Contributed	Contribution per State Statute	Percentage Contributed
June 30	Contribution	Statement #25	Contributed	State Statute	Contributed
2008	\$ 521,241,501	\$ 656,347,298	79.4%	\$ 521,241,501	100.0%
2009	563,454,487	669,643,988	84.1%	563,454,487	100.0%
2010	594,326,122	658,161,150	90.3%	594,326,122	100.0%
2011	594,732,137	684,366,766	86.9%	594,732,137	100.0%
2012	620,214,231	720,303,976	86.1%	620,214,231	100.0%
2013	634,040,335	507,232,268	125.0%	- 1	-

<sup>&</sup>lt;sup>1</sup> Contribution rates were unchanged from the prior year, therefore contributions were not limited by state statute in fiscal year 2013.

#### Public Education Employee Retirement System of Missouri

Year Ended June 30	Employer Contribution	Annual Required Contribution (ARC) per GASB Statement #25	Percentage Contributed	Maximum Contribution per State Statute	Percentage Contributed
2008	\$ 77,988,839	\$ 90,727,016	86.0%	\$ 77,988,839	100.0%
2009	85,915,562	96,775,289	88.8%	85,915,562	100.0%
2010	91,478,725	95,560,084	95.7%	91,478,725	100.0%
2011	90,816,155	90,816,155	100.0%	90,816,155	100.0%
2012	95,094,785	95,094,785	100.0%	95,094,785	100.0%
2013	97,059,313	87,013,816	111.5%	_ 1	-
<sup>1</sup> Contribution ra	tes were unchanged from the prio	r year, therefore contributions were i	not limited by state sta	tute in fiscal year 2013.	

#### Notes to the Schedules of Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation is as follows:

Valuation date	June 30, 2013
Actuarial cost method	Entry Age Normal
Amortization method	
PSRS (1)	Closed, level percent for 30 years, effective June 30, 2011 Open, level percent for 30 years, prior to June 30, 2011
PEERS (2)	Closed, level percent for 30 years, effective June 30, 2011 Open, level percent for 30 years, prior to June 30, 2011
Asset valuation method	Five-year smoothing of actual returns less expected returns Marked to market June 30, 2003
Actuarial assumptions: Investment rate of return Projected salary increases*	8.0%
PSRS	4.0 - 10.0%, effective June 30, 2011 5.0 - 10.25%, prior to June 30, 2011
PEERS	5.0 - 12.0%, effective June 30, 2011 5.0 - 10.0%, prior to June 30, 2011
*Includes inflation at	2.5%, effective June 30, 2011 3.25%, prior to June 30, 2011
Cost-of-living adjustments	2.0%, effective June 30, 2011 3.25%, prior to June 30, 2011

<sup>(1)</sup> The annual statutory increase in the total contribution rate may not exceed 1% of retirement salary. Contribution rates will be established in accordance with the Board of Trustees' Funding Stabilization policy and the recommendation of the independent actuary. The recommended contribution rate for fiscal year 2015 is 29.0%, which results in an effective amortization period of 29.4 years.

<sup>(2)</sup> The annual statutory increase in the total contribution rate may not exceed 0.5% of retirement salary. Contribution rates will be established in accordance with the Board of Trustees' Funding Stabilization policy and the recommendation of the independent actuary. The recommended contribution rate for fiscal year 2015 is 13.72%, which results in an effective amortization period of 31.0 years.

## **Required Supplementary Information**

Staff Retiree Health Plan - Defined Benefit OPEB Plan

		Schedule of Fu	inding Progress			
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)– (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/
6/30/11	\$ -	\$ 2,463,400	\$ 2,463,400	0.0%	\$7,582,300	32.5%
6/30/12	\$ -	\$ 2,532,800	\$ 2,532,800	0.0%	\$7,825,200	32.4%
6/30/13	\$ -	\$ 3,192,700	\$ 3,192,700	0.0%	\$ 8,425,400	37.9%
		Schedule of Empl	oyer Contribution	ns		
Year Ended		Annual Required Contribution (ARC)	C	Employer Contributions		Percentage Contribute
6/30/11		\$ 237,800		\$ 38,600		
6/30/12		\$ 246,800		\$ 50,900		20.6%
6/30/13		\$ 305,300	\$ 55,700		18.2%	
	S	chedule of Percentage	of OPEB Cost Cor	ntributed		
Year Ended		Annual OPEB Cost		entage of OP st Contribute		Net OPEB Obligation
6/30/11		\$ 245,400		15.7%		\$ 752,900
6/30/12		\$ 247,200		20.6%		\$ 949,200
6/30/13		\$ 305,800		18.2%		\$1,199,300

## Notes to the Schedules of Required Supplementary Information

The information presented in the required supplementary schedule was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Actuarial cost method	Entry Age Normal
Actuarial value of assets	No Assets (pay-as-you-go)
Amortization method	Level Percent Open
Remaining amortization period	30 Years
Actuarial assumptions:	
Investment rate of return	3.3% per year, 4.5% per year for fiscal year 2011
Wage inflation	3.5% per year, 5.0% per year for fiscal year 2011
Healthcare trend	7.5% in fiscal year 2013, decreasing by one-half percentage point per year to an ultimate of 4.5% in fiscal year 2019 and after

## **Schedules of Administrative Expenses**

for the year ended June 30, 2013

	PSRS	PEERS	Combined Totals
Personnel services	\$ 5,537,891	\$ 3,369,815	\$ 8,907,700
Professional services			
Actuarial services	257,288	138,749	396,037
Legal services	332,134	23,914	356,048
Technology consulting	124,110	76,068	200,178
Financial audit services	38,832	23,800	62,632
Legislative consulting	27,900	17,100	45,000
Other consultants	13,454	8,246	21,700
Insurance consulting	3,720	2,280	6,000
Total professional services	797,438	290,157	1,087,595
Communications			
Information and publicity	198,643	134,923	333,560
Postage	273,825	188,414	462,239
Member education	25,328	12,667	37,995
Telephone	30,240	18,528	48,768
Total communications	528,036	354,532	882,568
Miscellaneous			
Building and utilities	131,128	80,369	211,497
Insurance	77,964	47,784	125,748
Office	701,515	430,433	1,131,948
Staff development	137,054	86,160	223,214
Miscellaneous	158,617	72,088	230,705
Total miscellaneous	1,206,278	716,834	1,923,112
Depreciation expense	642,671	69,742	712,413
Total administrative expenses	\$ 8,712,314	\$ 4,801,080	\$ 13,513,394

## Schedules of Investment Expenses

for the year ended June 30, 2013

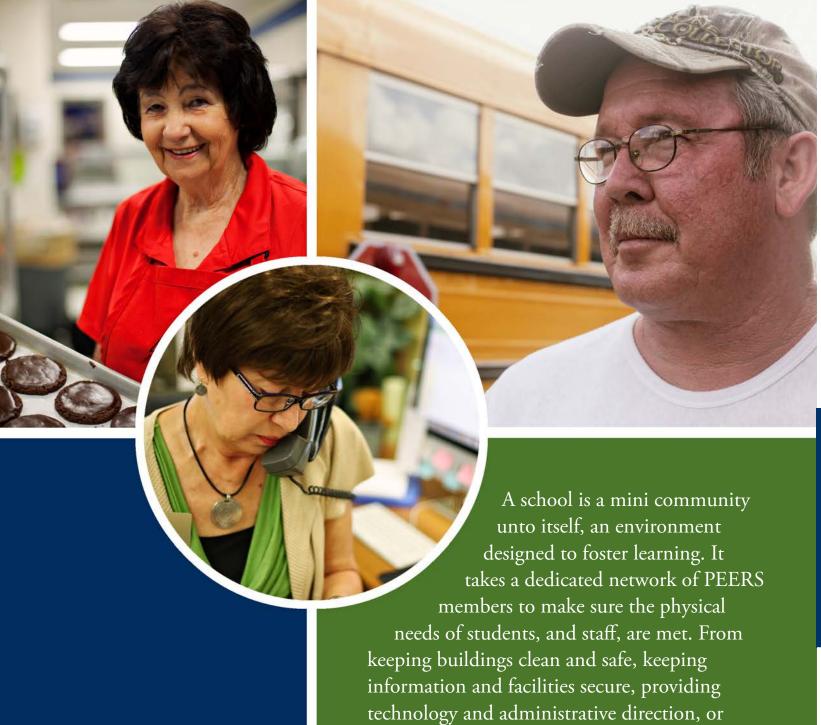
	PSRS	PEERS	Combined Totals
Investment management expenses			
U.S. Treasuries and TIPS	\$ 3,037,082	\$ 361,591	\$ 3,398,673
U.S. public equities	59,473,891	5,941,492	65,415,383
Global public equitites	16,243,819	1,785,095	18,028,914
Public debt	7,202,427	801,303	8,003,730
Private equity	83,505,561	13,267,302	96,772,863
Private credit	17,555,054	1,498,631	19,053,685
Private real estate	39,440,902	4,184,428	43,625,330
Hedged assets	102,688,586	10,759,920	113,448,506
Total investment management expenses	329,147,322	38,599,762	367,747,084
Investment consultant fees	3,098,458	290,335	3,388,793
Custodial bank fees	417,637	41,305	458,942
Investment staff expenses	3,657,042	2,104,767	5,761,809
Commission recapture income	(191,494)	(17,026)	(208,520)
Total investment expenses	\$ 336,128,965	\$ 41,019,143	\$ 377,148,108
Security lending expenses			
Agent fees	\$ 1,383,602	\$ 141,857	\$ 1,525,459
Broker rebates	(6,169,218)	(616,159)	(6,785,377)
Total security lending expenses (income)	\$ (4,785,616)	\$ (474,302)	\$ (5,259,918)

## Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri

## Schedules of Professional Services

for the year ended June 30, 2013

	 PSRS	PEERS	Coml	oined Totals
Actuarial services	\$ 257,288	\$ 138,749	\$	396,037
Legal expenses	332,134	23,914		356,048
Technology consulting	124,110	76,068		200,178
Financial audit services	38,832	23,800		62,632
Legislative consulting	27,900	17,100		45,000
Other consulting	13,454	8,246		21,700
Insurance consulting	3,720	2,280		6,000
Total fees	\$ 797,438	\$ 290,157	\$	1,087,595





From the minute the door opens in the morning to the last classroom is straightened up for the night, they set good examples as citizens, friends and leaders for our youth every day.

just being there with a good meal, to clean up a scraped knee or share a smile, PEERS members

are the glue that holds it all together.

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## LETTER FROM TOWERS WATSON



1191 Second Avenue Suite 1400 Seattle, WA 98101-2933

T +1 206 343 6000

towerswatson.com

November 12, 2013

To the Members of the Board,

Fiscal year 2013 was marked by large gains in developed equity markets while emerging markets and fixed income performed poorly. In the U.S., news of continued quantitative easing and accelerating GDP growth caused developed equity markets, both international and in the U.S., to increase dramatically. However, worries of the Federal Reserve's action regarding its quantitative easing program led to increased market volatility and negative returns in fixed income markets. In emerging countries, lower than expected GDP growth in most countries led the market significantly lower during the second half of this fiscal year. What provided aid to the equity markets was a disadvantage to the fixed income world. Fixed income trailed equities as investors experienced a long-awaited rise in interest rates. Longer dated U.S. government bonds returned -8%. Looking forward to the coming year, the focus will be on Fed tapering and the continued delay of a resolution to the U.S. debt limit.

The Total Fund return for the fiscal year ended June 30, 2013 was 12.6% for PSRS and 12.3% for PEERS, outperforming the policy benchmark return of 11.2%. The PSRS fiscal year return for public risk assets was strong at 15.5% and safe assets were down for the year at -1.8%, (15.4% and -1.8% for PEERS). PSRS private risk assets returned 13.1% versus 16.2% for its benchmark (12.8% versus 16.2% for PEERS).

Towers Watson is continuing to work with Missouri PSRS/PEERS in evaluating both the overall investment structure and individual managers in the U.S. and non-U.S. public equity composites. We are assisting in the evaluation of public equity managers that would be attractive additions to the portfolio.

We at Towers Watson have enjoyed our relationship with Missouri PSRS/PEERS and are looking forward to the coming year.

Regards,

Towers Watson Investment Services, Inc.

Michael M. Hall, ASA, CFA West Division Investment Leader

## LETTER FROM THE CHIEF INVESTMENT OFFICER



PUBLIC SCHOOL & EDUCATION EMPLOYEE RETIREMENT SYSTEMS OF MISSOURI

November 22, 2013

To the Members of the Systems,

Throughout this year's Financial Report you will see the phrase: "*Retirement security, today, tomorrow, together*." While this statement certainly addresses the PSRS/PEERS' commitment to help members manage their retirement security, it also refers to the investment program at the Systems. Together, the PSRS/PEERS Board of Trustees, investment staff, consultants and investment managers have built an investment program that will provide for member benefits both today and well into the future.

With that in mind, I present the following report on the Systems' investments for the fiscal year ended June 30, 2013 on behalf of the PSRS and PEERS Board of Trustees and the internal investment staff.

The Federal Reserve's commitment to a quantitative easing program, coupled with modest improvement in the growth of the economy, led to healthy returns for global stocks in fiscal year 2013. The strength in the investment markets directly resulted in solid gains for PSRS/PEERS this past year. Specifically, the Systems' assets increased through investment earnings by over \$3.6 billion from the previous year as the total fund performance was 12.6% for PSRS and 12.3% for PEERS.

## **Key Points Within This Year's Financial Report**

As you review the financial information in this report, we believe it is important to be aware of the following points for the fiscal year ended June 30, 2013:

- PSRS and PEERS significantly outperformed the assumed investment return of 8.0%.
- The PSRS and PEERS investment returns for fiscal year 2013 exceeded 61% of the peer group as defined by the Wilshire TUCS universe of public pension plans with assets in excess of \$1 billion.
- The Systems generated the investment returns while taking less risk than 78% of comparable public funds.
- The PSRS/PEERS internal investment staff and external investment managers added value above the
  policy benchmark of over \$380 million, net of all fees and expenses. The outperformance in 2013 was
  due to portfolio construction and tactical asset allocation by internal investment staff (overweighting
  and underweighting asset classes around targets) as well as active management on the part of external
  managers.
- The PSRS/PEERS investment expenses (including accrued performance based fees and all internal investment staff expenses) for fiscal year 2013 were 1.13%, or \$1.13 for every \$100 managed. The investment returns reported throughout this publication are mostly net of these fees. The investment return net of all fees and expenses was 12.4% for PSRS and 12.1% for PEERS.
- Investment performance throughout this report is calculated using a time-weighted rate of return based on market values.
- The total assets of both PSRS and PEERS were approximately \$33.5 billion on June 30, 2013, making the combined entity larger than all other public retirement plans in the state combined, and the 44th largest defined benefit plan in the United States.

 Location
 3210 W. Truman
 Blvd. / Jefferson City, M0 65109
 Mail
 P.O. Box
 268 / Jefferson City, M0 65102
 Phone
 (573) 634-5290

 Toll Free
 (800)
 392-6848
 Email
 psrspeers@psrspeers.org
 Member
 Services
 FAX
 (573) 634-7931
 Employer
 Services
 FAX
 (573) 634-7911

## **PSRS/PEERS Investment Process**

The PSRS/PEERS Board of Trustees has embraced an investment process that focuses on three core functions. The internal investment staff continues to work with the Executive Director and the Board to refine each of those areas:

#### (1) Governance Model

The Systems have developed a process that provides the long-term framework and flexibility for the internal investment staff to execute investment actions across varying market environments through measurable policies and procedures.

#### (2) Asset Allocation

The PSRS/PEERS asset allocation is built upon both asset class returns and risks, but also incorporates specific broader objectives. For example, the asset allocation directly takes into account both liquidity and tail risk. The Systems must maintain adequate liquidity to meet all benefit payments and cash needs for an extended period of time regardless of the economic environment. The tail risk concept refers to the risk that very bad market events will occur faster and more often than expected.

## (3) Investment Operations

A more flexible governance model and asset allocation process adds a layer of complexity to investment risk management and monitoring. As such, PSRS/PEERS expanded its investment department in the last fiscal year to include an operations team.

The PSRS/PEERS investment process has been established to increase the probability that the Systems can achieve the assumed investment return of 8.0% over long periods of time and to reduce the market and operational risk associated with the safety of the investments.

#### Fiscal Year 2013 Year in Review

The internal investment staff, under the direction of the PSRS/PEERS Board of Trustees, has implemented a disciplined and diversified investment portfolio over the past several years that includes allocations to multiple asset classes. In each year or market cycle, every specific asset class within the PSRS/PEERS investment portfolio performs a valuable function.

In fiscal year 2013, the combined asset allocation provided the Systems with substantial absolute returns, led by above average returns from global stocks. U.S. stocks returned 21.5% for the fiscal year ended June 30, 2013 (as measured by the Russell 3000 Index), non-U.S. developed stocks moved 18.6% higher (as measured by the MSCI EAFE Index), and emerging market stocks increased 2.9% (as measured by the MSCI Emerging Markets Index). In contrast, U.S. Treasury Bonds and U.S. Treasury Inflation Protection Securities (TIPS) provided lower than expected absolute returns for PSRS/PEERS, declining 1.4% and 3.1% respectively.

The PSRS/PEERS non-traditional asset classes provided strong returns in fiscal year 2013. The Hedged Asset Program represented just over 14% of total fund assets at fiscal year-end and generated an 8.5% return, outperforming the one-year return of the HFRI Fund Weighted Composite Hedge Fund Index at 8.2%. The objective of the Hedged Assets Program is to provide competitive returns, diversification and lower volatility (risk) than the Systems' stock portfolios. Diversification into private equity, private real estate and private credit proved beneficial for the year as the Private Equity Composite returned 14.8%, the Real Estate Composite increased 12.1%, and the Private Credit Composite increased 9.8%. The adoption of non-traditional asset classes were not only additive to the PSRS/PEERS total fund performance in fiscal year 2013, but also proved beneficial over the last five years.

As noted above, significant absolute returns in most of the major asset classes contributed to the 12.6% and 12.3% returns for PSRS and PEERS respectively. Additionally, the investment returns were supported by solid implementation (stock selection) and tactical asset allocation decisions. For example, the PSRS/PEERS U.S. Equity portfolio outperformed its benchmark (Russell 3000 Index) by 1.5% in fiscal year 2013, while the PSRS/PEERS Global Equity portfolio outperformed its benchmark (MSCI ACWI-ex U.S.) by 3.3%.

## LETTER FROM THE CHIEF INVESTMENT OFFICER (continued)

From a portfolio construction and tactical standpoint, the internal investment staff maintained a significant underweight to Safe Assets throughout the year (due to historically low interest rates) and a substantial overweight to U.S. stocks and emerging market stocks relative to Europe. The underweight to Safe Assets and the overweight to U.S. stocks for the fiscal year provided meaningful contribution to the overall PSRS/PEERS returns.

## Fiscal Year 2014: A Promising Start But An Uncertain Future

As I write the annual letter at the end of November 2013, the investment markets continue to be impacted by volatility and a Federal Reserve quantitative easing program without an exit plan. The Systems have directly benefited from the easy monetary policy in the first five months of fiscal year 2014, as stock prices have reached new all-time highs.

Despite the strong returns for PSRS/PEERS in both fiscal year 2013 and the beginning of fiscal year 2014, there continues to be a great deal of uncertainty regarding the global economy and expected investment returns going forward. The economic recovery in the U.S. continues to limp along, the fiscal problems in the U.S. and much of the world persist, the future of Europe is largely unascertainable, and the fragility of the capital markets remain highly dependent on low interest rates and continued quantitative easing. That is a formidable headwind to earning higher returns. Additionally, we know with some certainty that the expected return for bonds going forward is very low. Short-term Treasury Bills are currently yielding close to zero and a 10-year Treasury bond held to maturity will produce a 2.7% return.

To that end, as stewards of your retirement assets, we will continue to focus on the long-term investment horizon, but also adjust the PSRS/PEERS portfolio as market dynamics change. For example, most asset prices (stocks and bonds) are high, or at least fully valued, from a fundamental standpoint. As such, we have begun to rebalance somewhat out of both stocks and bonds and increase the allocation to cash and private investments in fiscal year 2014. The PSRS/PEERS asset allocation continues to exhibit an overweight to U.S. stocks relative to developed Europe stocks due to an uncertain outlook for Europe and an overweight to emerging market stocks due to higher long-term growth prospects and better fundamental valuations. Finally, in terms of investment implementation, we have increased the Systems' allocation to active management in fiscal year 2014 due to an expectation that we can achieve a greater level of 'alpha' (or excess return above the market) in a less certain market environment.

Under the support and guidance of the Board of Trustees, with the assistance from external service providers and with the work of our internal investment staff, I am confident that *together*, the investment program at PSRS/PEERS will continue to meet the long-term investment objectives of the Systems within appropriate levels of risk. Specifically, the PSRS/PEERS investment program has been built to provide *retirement security* to our almost 230,000 retirees, active teachers and school employees for both *today and tomorrow*.

Respectfully,

Craig A. Husting, CFÁ Chief Investment Officer

## INVESTMENT POLICY SUMMARY

The Board of Trustees of the Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri (PSRS and PEERS, also referred to as the Systems) is charged with the responsibility for investing the assets of the Systems in a manner consistent with the fiduciary standards set forth in the 'prudent person' rule. To that end, the Board has adopted the following principles to guide all investment-related decisions:

- 1. Act in the exclusive interest of the members of the Systems
- 2. Maximize total return within prudent risk parameters
- 3. Preserve the long-term purchasing power of the Fund

The investment portfolios of PSRS and PEERS represent all contributions to the plans, from members and their employers, as well as all net earnings on these assets. These funds are held in support of both current and future liabilities. In total, approximately 60% of every dollar used to pay retirees is generated from investment earnings.<sup>1</sup>

## **Investment Objective**

Based on the general beliefs about the long-term investment returns available from a well-diversified, prudently invested portfolio, the Board has adopted an objective to achieve a total nominal investment return of 8.0% with a real rate of return of at least 5.5% per annum over time.<sup>2</sup>

In order to achieve this rate of return, the Systems have developed a portfolio that is prudently invested across a broad array of assets that reflects the long-term nature of the Systems' pension obligations. The principles of diversification, risk control, and competitive rates of return provide the framework for selecting an asset allocation that is expected, over longer periods of time and in the aggregate, to give the Systems the most competitive long-term return within a prudent level of risk.

## **Understanding Risk**

Selection of an appropriate asset allocation is one of the most important decisions made by a retirement plan. Within that asset allocation, it has always been important to not only consider the expected investment return, but also to understand the risks. The importance of risk consideration for institutional investors is critical to long-term success. To that end, the Systems continue to employ an effective and intuitive risk-based approach to setting and reporting the asset allocation decision. The Systems developed a risk-based asset allocation to clearly define the prudent risks taken within its investment portfolios. The Systems consider a variety of risks including, but not limited to, liquidity risk, volatility, tail risk (the possibility that an investment will move much more than expected) and the ability to meet the Systems' assumed rate of return when structuring the portfolio.

This analysis results in an asset allocation to Public Risk Assets, Safe Assets and Private Risk Assets. Within each risk allocation, the Systems' investment portfolio includes strategic, long-term commitments to specific asset programs.



<sup>&</sup>lt;sup>1</sup> Based on a 15-year average for fiscal years 1998-2013

<sup>&</sup>lt;sup>2</sup> The real rate of return is the rate by which the long-term total return exceeds the long-term inflation rate. The Board of Trustees shall employ an actuarial consultant for purposes of determining the inflation rate to be used in calculating the PSRS and PEERS pension obligations. The assumed inflation rate as of June 30, 2013 was 2.5% per annum.

## **Roles and Responsibilities**

#### **Board of Trustees**

It is the responsibility of the Board of Trustees (Board) to establish and maintain policies and objectives for all aspects of the Systems' investment program including the determination of long-term policies for risk tolerance and asset allocation.

In keeping with its obligation to serve as the governing fiduciary, any changes to the investment policy or investment implementation manuals require the Board's approval.

As one of the largest public pension funds in the United States, the Systems' operational requirements are complex. In order to properly administer the Systems and carry out investment strategies, the Board relies heavily on both internal staff and external service providers. Due to the number of parties involved, their roles as fiduciaries are clearly identified to ensure distinct lines of responsibility and proper controls exist, while providing increased operational efficiency and elimination of duplication of effort.

#### **Executive Director**

The Executive Director (Director) is appointed by, and serves at the pleasure of the Board. The Director is responsible for planning, organizing and administering all operations of the Systems under the broad policy guidance and direction of the Board. The Director, with the assistance of the investment staff, monitors the performance of the investment portfolio; ensures that funds are invested in accordance with Board policies; and ensures that proper internal controls are developed to safeguard the assets of the Systems. In fulfilling these responsibilities, the Director relies heavily on the Chief Investment Officer and external asset consultants.

#### **Chief Investment Officer**

The Chief Investment Officer (CIO) serves at the pleasure of the Director yet has a direct, but limited, link to the Board on investment-related issues. The CIO's sole access to the Board is for submission of investment reports, information or communications required by the investment policy and any other information or opinions specifically requested by the Board with regard to the investment program. The CIO is the individual primarily responsible for providing direction for the investment program. It is the CIO's responsibility to work with the Director, the general consultant, specialty consultants and

other external service providers with the assistance of the internal staff in advising the Board on policies related to the investment program. The CIO has responsibilities related to hiring and terminating service providers.

Critical functions of the CIO include recommendations for implementation decisions related to the investment plan and for the strategic allocation of the portfolio within broad ranges approved by the Board.

#### **External Asset Consultants**

The Systems employ Towers Watson as a general consultant and Albourne America, LLC (Albourne), Pathway Capital Management (Pathway) and The Townsend Group (Townsend) as specialty consultants. Towers Watson is an independent resource available to collaborate with the Board and staff to manage the investment process. This typically includes regular meetings with the Board to provide an independent perspective on the Systems' goals, structure, performance and external service providers. Additionally, Towers Watson may be involved with the strategic allocation shifts for the portfolio.

The specialty consultants work on specific programs within the overall investment program. Albourne is utilized for the Hedged Assets and Alpha Overlay programs, Pathway is the consultant for the Private Equity and Private Credit programs and Townsend consults on the Real Estate program. During 2013, Albourne was contracted as a Private Credit consultant.

#### **External Investment Managers**

The Systems employ external investment managers that include external money managers which may be structured as public or private entities in the form of a partnership, limited liability company, trust, separately managed account, commingled account, or some other form of operational structure in which assets may be held by an external custodian selected and monitored by the external manager.

Managers are given explicit written directions detailing their particular assignments or they follow the investment program outlined in their offering documents or Limited Partnership Agreements, and will construct and manage investment portfolios that are consistent with the investment philosophy and disciplines for which they were hired. Discretion is delegated to the managers to carry out investment actions as directed by the Systems.

#### Master Custodian

JP Morgan Chase Bank, NA (JP Morgan) serves as the master custodian for the Systems. The master custodian holds all cash and securities for PSRS and PEERS, except in cases where investment in a partnership, commingled account, or unique asset class makes it impossible to do so. The Systems thoroughly evaluate the structure of all investments and their custody arrangements. JP Morgan is responsible for providing the official book of record for performance reporting and accounting, and serves as an additional layer of risk control in safekeeping the Systems' assets.

#### **Asset Allocation**

The asset allocation decision is generally regarded as the most important decision in the investment management process since it is crucial to achieving the long-term objectives established by the Board. In that light, it is the Board's responsibility to determine the appropriate policy asset allocation based upon several criteria with input and guidance from internal staff and Towers Watson. These criteria are as follows:

- 1. The expected rate of return for each asset classification
- The expected risk of each asset classification (expressed as the standard deviation of the rate of return)
- 3. The correlation of returns between asset types
- 4. The investment objectives and risk constraints of the Systems (including but not limited to liquidity needs and the expected time horizon)
- The funded ratio and cash flow requirements for PSRS and PEERS
- 6. The impact of the Systems' return volatility on the contribution rate

The long-term policy allocation as of June 30, 2013 is illustrated in the following table. The allocation to each investment program considers both the risk tolerance of the Systems and the long-term return objective.

Asset Allocation				
Investment Type	Long-Term Target	Policy Range		
Public Risk Asset Programs				
U.S. Public Equity	27.00%	16% - 48%		
Public Credit	12.00%	0% - 20%		
Hedged Assets	6.00%	0% - 25%		
Global Public Equity	15.00%	8% - 28%		
Total Public Risk Assets	60.00%	35% - 75%		
Safe Assets				
U.S. Treasuries	16.00%	0% - 40%		
U.S. TIPS	4.00%	0% - 40%		
Total Safe Assets	20.00%	10% - 40%		
Private Risk Asset Program.	S			
Private Equity	10.50%	4% - 14%		
Private Real Estate	7.50%	4% - 10%		
Private Credit	2.00%	0% - 7%		
Total Private Risk Assets	20.00%	5% - 25%		
Total Fund	100.0%			

The Board recognizes the cyclical nature of the investment markets and it has allowed the internal staff to capitalize upon opportunities by changing the allocation of each asset class or sub-asset class within broad strategic bands or policy ranges (as indicated in the table above). The flexibility given to the internal staff in establishing the strategic mix provides opportunities for the Systems to take advantage of changing market conditions. To ensure appropriate controls, the Director, CIO and Towers Watson must unanimously agree upon all material strategic changes prior to implementation.

## **Performance Objectives and Monitoring Process**

Generating a total nominal rate of return net of expenses of at least 8% and a real rate of return net of expenses of at least 5.5% per annum is an important consideration in the asset allocation decision and the primary performance objective for the Systems over long periods of time. The need for a long-term focus is necessary to preclude the temptation to overreact to events in the financial markets that have no relevance to long-term asset/liability management of the Systems. The resulting dilemma is the conflicting need to evaluate investment policy implementation over shorter time periods while maintaining a longer-term focus on meeting the return objectives. In order to determine if the Systems' shortterm and long-term objectives are being achieved, the Board evaluates performance relative to policy and strategic benchmarks. The policy benchmarks allow the Systems to be judged by performance relative to a defined set of broad market indices (i.e., the Systems' long-term asset allocation objective). The strategic benchmarks allow the Board to consider the additional value generated from the latitude given to the internal staff to alter the asset class or sub-asset class allocations.

## **Policy Decisions**

The value added through policy decisions is measured by the difference between the policy benchmark return and the actuarial required rate of return objective (defined as Real Return Objective plus Inflation). A policy benchmark return greater than the actuarial required rate of return reflects value added. A policy benchmark return less than the actuarial required rate of return reflects losses or shortfalls in performance in funding the liabilities of the Systems. These policy decisions are measured over long periods of time.

#### Strategy Decisions

Strategy decisions are asset class or sub-asset class asset allocation choices made by the internal staff to deviate from the policy benchmark weights, with approval from the General Consultant and the Director that the proposed material deviation is in compliance with the Board's investment policy. The value added through these decisions to overweight and/or underweight these sub-asset classes is measured by the difference

between the strategic benchmark return and the policy benchmark return. This difference captures the value added by internal staff through sub-asset class strategic decisions relative to the Board's broad policy allocation decisions. A strategic benchmark return greater than the policy benchmark return reflects value added through the allocation decisions. A strategic benchmark return less than the policy benchmark return reflects losses to the fund's performance based upon strategy decisions.

#### Implementation Decisions

Implementation decisions are manager selection choices made by the internal staff with the approval of a consultant(s) and the Director. The value added through these manager selection decisions is measured by the difference between the actual portfolio return and the strategic benchmark return. An actual portfolio return greater than the strategic benchmark return reflects value added through these manager selection decisions. An actual portfolio return less than the strategic benchmark return reflects losses to the fund's performance based upon implementation decisions.

#### **Risk Controls**

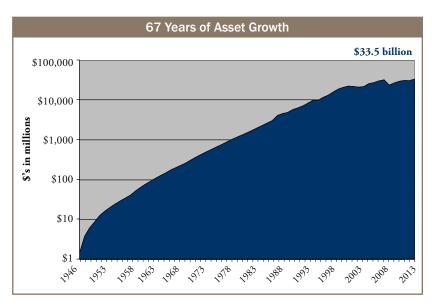
The Board recognizes that even though the Systems' investments are subject to short-term volatility, it is critical that a long-term investment focus be maintained. Given the importance of the broad asset allocation decision to the Systems' long-term investment success, internal staff is required to conduct an asset allocation/liability study at least every five years and to report the results of that study to the Board. In addition, the CIO must annually evaluate the asset allocation mix and any strategic allocation of the portfolio and provide a report to the Board on the results of that evaluation. This ongoing review of the asset allocation process helps to ensure the asset allocation is being monitored and modified as needed to meet the financial obligations of the Systems.

## TOTAL FUND REVIEW

The Systems' total invested assets were \$33.5 billion as of June 30, 2013. There has been a consistent and long-term growth in assets since the inception of PSRS in 1946 and PEERS in 1965, as shown in the graph.

## **Investment Performance**<sup>3</sup>

The Systems achieved strong absolute and relative returns in fiscal year 2013. PSRS and PEERS earned returns of 12.6% and 12.3%, respectively, for fiscal year July 1, 2012 through June 30, 2013. The PSRS and PEERS returns net of all fees and expenses were 12.4% and 12.1%, respectively.



These earnings resulted in an increase in

total net assets of approximately \$2.9 billion over the previous year, largely due to strong gains in developed equity markets. The returns exceeded both the Systems' policy benchmark of 11.2%, and the 8.0% actuarially assumed rate of return. Additionally, the strong returns were achieved while once again taking less investment risk than a large majority of other public pension funds in the nation.

As illustrated in the tables below within the respective PSRS and PEERS investment portfolios, U.S. stocks delivered returns of 23.0% and 22.7%, global stocks returned 15.9% and 16.3%, private equity (investments in private companies) increased 14.8% and 14.6%, real estate produced 12.1% and 11.9% returns, and hedged assets returned 8.5% and 8.2%. Each of these asset classes strongly contributed to the total fund returns for PSRS and PEERS while providing diversification from fixed income securities. The return on fixed income securities trailed the return on equity securities during the fiscal year primarily due to increased interest rates.

PSRS Total Fund Performance				
Assets	Total Return	Weighted Contribution*		
U.S. Public Equity	23.0%	7.4%		
Public Credit	1.3%	0.1%		
Hedged Assets	8.5%	1.2%		
Global Public Equity	15.9%	2.2%		
Public Risk Assets	15.5%	10.9%		
U.S. Treasuries	-1.6%	-0.2%		
U.S. TIPS	-3.0%	0.0%		
Safe Assets	-1.8%	-0.2%		
Private Equity	14.8%	0.9%		
Private Real Estate	12.1%	0.9%		
Private Credit	9.8%	0.1%		
Private Risk Assets	13.1%	1.9%		
Total PSRS	12.6%	12.6%		

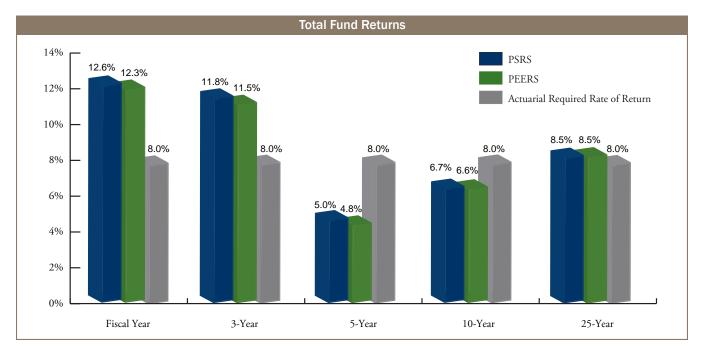
PEERS Total Fund Performance				
Assets	Total Return	Weighted Contribution*		
U.S. Public Equity	22.7%	7.3%		
Public Credit	1.2%	0.1%		
Hedged Assets	8.2%	1.1%		
Global Public Equity	16.3%	2.3%		
Public Risk Assets	15.4%	10.8%		
U.S. Treasuries	-1.7%	-0.2%		
U.S. TIPS	-3.0%	0.0%		
Safe Assets	-1.8%	-0.2%		
Private Equity	14.6%	0.8%		
Private Real Estate	11.9%	0.8%		
Private Credit	10.1%	0.1%		
Private Risk Assets	12.8%	1.7%		
Total PEERS	12.3%	12.3%		

<sup>\*</sup>Percentages have been adjusted to reflect compounding effects and changes in asset weights.

<sup>&</sup>lt;sup>3</sup>Investment returns were prepared using a time-weighted rate of return based on market values.

## **Investment Performance Relative to Benchmarks**

The Board has established a long-term goal to achieve a total investment return of at least 8.0% per year and a real rate of return of at least 5.5% per year. The investment returns for the fiscal year and three-year time periods are substantially higher than the long-term investment objective. The annualized returns for medium-term time periods are less than the long-term investment objective of 8.0% due to the severe credit crisis and resulting market decline experienced during 2008 and early 2009. Additionally, as the table indicates, the 25-year annualized total returns of 8.5% for PSRS and PEERS exceed the long-term return objective of 8.0%.

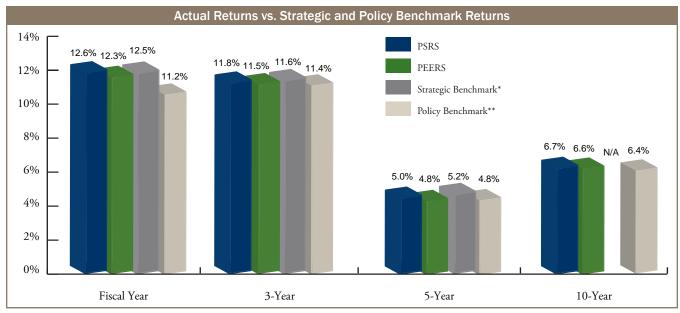


In order to determine if the Systems' shorter-term and long-term objectives are being achieved, the Board also utilizes three benchmarks by which the Systems' progress may be judged: (1) performance relative to a **policy benchmark** (defined set of broad market indices that reflects the Systems' long-term asset allocation, or market beta), (2) performance relative to a **strategic benchmark** which indicates value added by the internal staff, and, to a lesser extent, (3) performance relative to other public pension systems and their investment managers as a reference point of oversight.

The internal staff presents to the Board a detailed attribution of the total fund performance at the end of each fiscal year. Value is added over and above expected market returns if the strategic benchmark exceeds the policy benchmark (i.e., the internal staff made positive strategic decisions) and/or if the actual total fund return exceeds the strategic benchmark. The table below summarizes the substantial value that was created in fiscal year 2013.

Performance Attribution		
	PSRS	PEERS
Strategic Benchmark	12.54%	12.54%
Policy Benchmark	11.19%	11.19%
Value Added Through Strategic Decisions to Reposition Portfolio	1.35%	1.35%
Actual Fund Return	12.64%	12.30%
Strategic Benchmark	12.54%	12.54%
Value Added Through Implementation	0.10%	-0.24%
Total Value Added	1.45%	1.11%
Fees Paid Outside of Investment Structures	-0.20%	-0.20%
Total Value Added (Net of Fees and Expenses)	1.25%	0.91%

The total PSRS and PEERS returns exceeded the policy benchmark by 1.25% and 0.91% (net of all fees and expenses), respectively, for fiscal year 2013. This resulted in over \$380 million in excess performance to the Systems. The PSRS and PEERS total fund returns have exceeded the policy benchmark in five of the last eight fiscal years, an indication that internal staff and active investment management have added value to the Systems. It is important to note that during that timeframe, internal staff navigated some of the most volatile market conditions in history.

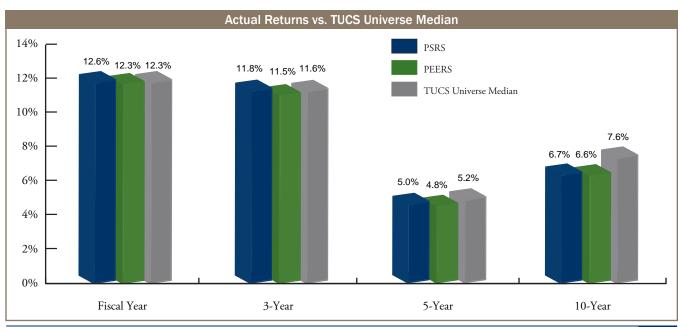


\*As of June 30, 2013: 45.9% Russell 3000 Index, 17.0% MSCI All Country World ex-U.S. Free Index, 15.5% Barclays Capital Credit Intermediate Index, 11.4% Barclays Capital Treasury Blend, 7.5% NCREIF Property Index, 1.5% Barclays Capital U.S. TIPS 1-10 Year Index, and 1.2% Bank of America Merrill Lynch High Yield Master II Index. Strategic Benchmark data is not available for periods dating back 10 years or more.

\*\*As of June 30, 2013: 39.0% Russell 3000 Index, 16% Barclays Capital Treasury Blend, 16.5% MSCI All Country World ex-U.S. Free Index, 15% Barclays Capital Intermediate Credit Index, 7.5% NCREIF Property Index, 4% Barclays Capital U.S. TIPS 1-10 Year Index, and 2% Bank of America Merrill Lynch High Yield Master II Index.

The Systems utilize the Trust Universe Comparison Services (TUCS) to compare the total return and risk levels of PSRS and PEERS relative to other public pension funds with assets in excess of \$1 billion.

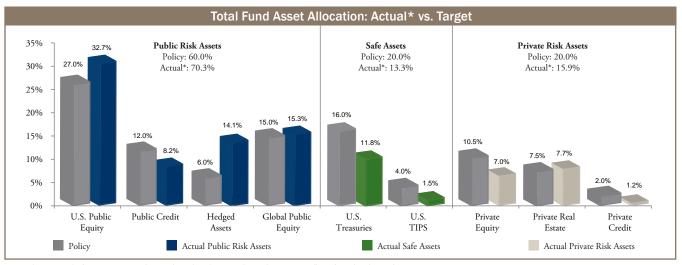
As the chart below indicates, the PSRS total return for the fiscal year, as well as for three-year time period exceeded the median return of other large public funds. PSRS' and PEERS' total returns for the five- and ten-year time periods were at or marginally below the public fund median return primarily due to asset allocation and risk tolerance differences. The 2013 TUCS universe data indicates that PSRS and PEERS have taken less risk than 70% of other comparable public funds over the last five years.



## **Asset Allocation: Actual Versus Target**

The Board's broad policy allocation target as of June 30, 2013 was 60% Public Risk Assets, 20% Safe Assets and 20% Private Risk Assets. Within each broad policy target, the Board has established sub-asset class targets. For example, as the chart below indicates, the target allocation to U.S. Public Equity was 27% as of June 30, 2013. The Board made no changes to the policy targets during fiscal year 2013.

As illustrated in the chart, internal staff utilized the flexibility built into the investment policy to strategically overweight or underweight certain asset classes throughout the year. Significant strategic decisions during the current year included the strategic underweight to Safe Assets and an overweight to Public Risk Assets. Specific strategic decisions within the Public Risk Assets program were the substantial overweight to U.S. equities and emerging market stocks relative to Europe, while underweighting Public Credit. These tactical asset allocation decisions by internal staff contributed significantly to the value added above the policy benchmark for the fiscal year.



\*Actual assets include 0.5% invested in cash and cash equivalents that is not reflected in the chart above.

#### **Statistical Performance**

One of the primary investment objectives of the Systems is to achieve returns similar to the market but at lower risk or volatility levels. To that end, internal staff monitors a number of quantitative risk statistics related to the total investment portfolio as well as individual composites. The table below indicates that the Systems have taken substantially less risk than the policy benchmark (as measured by standard deviation) over all time periods while achieving higher returns, thereby indicating strong risk-adjusted performance.

**Beta** measures the volatility, or systematic risk, of a security or portfolio in comparison to the market as a whole. If a portfolio has a beta of 1.0, it indicates that the portfolio moves in unison with the market. The Systems' portfolios have a beta of less than 1.0 relative to the policy benchmark, indicating less market volatility. The Systems' beta relative to the world stock index (ACWI World Index) is approximately 0.50. This signifies that the Systems' portfolio moves up or down approximately half as much as the world stock index.

Total Plan Statistical Performance					
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	10-Year	
Annualized PSRS Return	12.6%	11.8%	5.0%	6.7%	
Annualized PEERS Return	12.3%	11.5%	4.8%	6.6%	
Annualized Policy Benchmark Return*	11.2%	11.4%	4.8%	6.4%	
Annualized Strategic Benchmark Return**	12.5%	11.6%	5.2%	N/A	
Excess Return†	1.4%	0.4%	0.2%	0.3%	
Annualized Standard Deviation of Composite***	3.8%	7.8%	10.9%	8.9%	
Annualized Standard Deviation of Policy Benchmark***	4.1%	8.4%	12.5%	9.9%	
Beta to Policy Benchmark***	0.91	0.92	0.86	0.89	
Beta to ACWI World Index***	0.52	0.48	0.51	0.52	

<sup>\*</sup>The Total Plan policy benchmark is composed as follows: 16.0% Barclays Capital U.S. Treasury Blend, 4.0% Barclays Capital U.S. TIPS 1-10 Year Index, 39.0% Russell 3000 Index, 16.5% MSCI All Country World Free Ex-U.S. (Net) Index, 15.0% Barclays Capital Intermediate Credit Index, 7.5% NCREIF Property Index, 2.0% Merrill Lynch High Yield Master II Index.

<sup>\*\*</sup>The Total Plan strategic benchmark changes monthly based on the actual asset allocation at the end of the previous month. It was established more recently so a 10-year return is not available.

<sup>\*\*\*</sup> Risk statistics are calculated on the PSRS portfolio but are indictive of the PEERS portfolio.

<sup>†</sup>PSRS excess return relative to the Total Plan policy benchmark

## PUBLIC RISK ASSETS CLASS SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Public Risk assets had a market value of approximately \$23.5 billion, representing 70.3% of total assets.

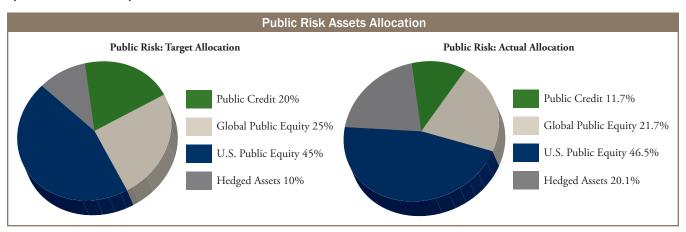
## **Investment Program Description**

The Board adopted an asset allocation policy at the June 8, 2009 Board of Trustees' meeting that includes a broad allocation to Public Risk Assets. The asset allocation was reconfirmed by the Board on October 24, 2011. The four programs within the Public Risk Asset composite are U.S. Public Equity, Public Credit, Hedged Assets and Global Public Equity. Each program within the Public Risk allocation is a separate multi-manager composite that is treated generally as a single portfolio. Each program serves a specific and distinct role within the overall Public Risk composite and also within the overall total plan allocation. Over time, the Public Risk composite and its sub-components serve as an effective and efficient vehicle to supply the underlying beta exposure to a portfolio of global risk assets required by the Systems' asset allocation policy, while providing the opportunity to achieve excess returns above that of a passive equity benchmark<sup>4</sup> through the prudent combination of passive investment vehicles and a wide range of active investment strategies.

#### **Structure**

As of June 30, 2013, 46.5% of the Systems' Public Risk assets were invested in the U.S. Public Equity program, 21.7% in the Global Public Equity program, 11.7% in the Public Credit program and 20.1% in the Hedged Assets program. Each of these programs are discussed in more detail on the following pages.

The internal staff strategically overweighted the total plan to Public Risk assets during the year. The target allocation for Public Risk assets is 60% and the Systems' allocation at the end of the fiscal year was 70.3%. Within the Public Risk Assets composite, internal staff strategically overweighted U.S. Public Equity and Hedged Assets, while significantly underweighting Public Credit. The Systems' maintained a minor overweight to Global Equity during the year, but more importantly internal staff restructured the Global Equity portfolio for optimum performance at the beginning of the fiscal year. U.S. and developed global equity markets experienced large gains during the fiscal year while public credit performed poorly; therefore the employed strategic decisions contributed significant value to the Systems for the fiscal year.



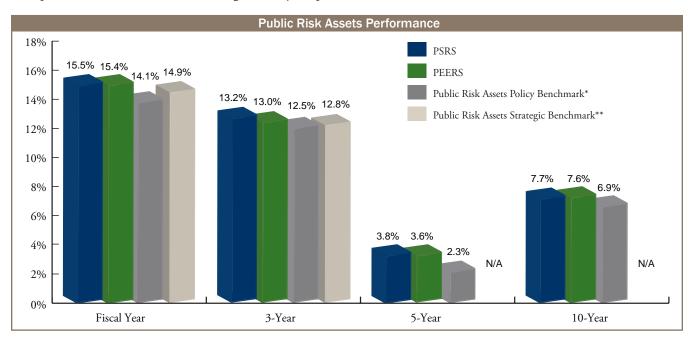
#### **Market Overview**

The global developed equity markets experienced significant gains during the fiscal year, fueled in the U.S. by news of continued quantitative easing and accelerating GDP growth. The Russell 3000 Index (broad measure of the U.S. stock market) was up 21.5% for the year and the MSCI All Country World ex-U.S. Index (broad measure of the international stock markets) gained 13.6%. Bond markets struggled during the year due to a significant increase in interest rates leading to a modest gain for the Public Credit benchmark (Barclays Capital Intermediate Credit Index) of 2.0%.

<sup>&</sup>lt;sup>4</sup>The customized Public Risk policy benchmark is comprised of 47.5% Russell 3000 Index, 27.5% MSCI All Country World Free Ex-U.S. (Net) Index and 25.0% Barclays Capital Intermediate Credit Index.

#### **Performance**

The total returns for the PSRS and PEERS Public Risk portfolios were 15.5% and 15.4%, respectively, compared to the benchmark return of 14.1% for the fiscal year ended June 30, 2013. As shown in the table and graph, the PSRS and PEERS Public Risk portfolio outperformed the policy benchmark by 140 basis points and 130 basis points, respectively. The strong performance relative to the benchmark can be primarily attributed to tactical asset allocations by the internal staff and solid active management from external money managers. For the three-, five- and 10-year time periods, both PSRS and PEERS significantly outperformed the benchmark as noted below.



Public Risk Assets Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	10-Year
Annualized PSRS Return	15.5%	13.2%	3.8%	7.7%
Annualized PEERS Return	15.4%	13.0%	3.6%	7.6%
Annualized Policy Benchmark Return*	14.1%	12.5%	2.3%	6.9%
Annualized Strategic Benchmark Return**	14.9%	12.8%	N/A	N/A
Excess Return†	1.4%	0.7%	1.5%	0.8%
Annualized Standard Deviation of Composite	5.4%	11.5%	16.8%	14.0%
Annualized Standard Deviation of Policy Benchmark*	5.4%	11.7%	17.6%	14.0%
Beta to Policy Benchmark*	1.01	0.98	0.95	0.97
Beta to ACWI World Index	0.75	0.72	0.79	0.83

<sup>\*</sup>The Public Risk Assets policy benchmark is composed as follows: 47.5% Russell 3000 Index, 27.5% MSCI ACWI ex-U.S. (Net), 25% Barclays Credit Intermediate.

†PSRS excess return relative to the Public Risk Assets policy benchmark

The table indicates that the Systems have taken similar risk relative to the policy benchmark (as measured by standard deviation) while achieving higher returns over longer time periods, thereby indicating strong risk-adjusted performance. Additionally, the Systems' portfolios have a beta of less than 1.0 relative to the policy benchmark over longer time periods shown, indicating less market risk.

<sup>\*\*</sup> The Public Risk Assets strategic benchmark changes monthly based on the actual asset allocation at the end of the previous month. It was established more recently so five-and 10-year returns are not available.

## U.S. PUBLIC EQUITY PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS U.S. Public Equity assets had a market value of approximately \$10.9 billion, representing 32.7% of total assets.

## **Investment Program Description**

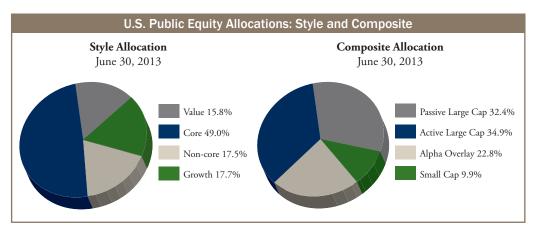
U.S. Public Equity is comprised of the Large-Cap and Small-Cap programs which seek to provide long-term capital appreciation and dividend income in excess of inflation through the investment in domestic equity securities. Returns above a purely passive investment benchmark are targeted through the use of a wide variety of active investment strategies that may employ exposure to both equity securities and other types of investments. The primary *beta* exposure is achieved through investments in passive investment vehicles (including derivatives), traditional long-only active domestic equity management, and active long/short approaches. *Alpha* (or, excess returns above a passive alternative) is expected to be achieved through traditional long-only active domestic equity management, active long/short approaches and alpha overlay strategies (described in greater detail at the end of this section).

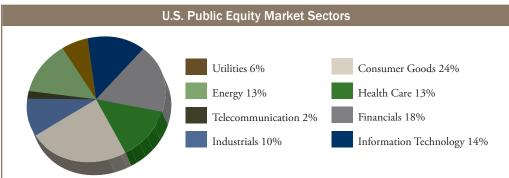
#### **Structure**

As of June 30, 2013, 32.4% of the PSRS/PEERS U.S. Public Equity composite was passively managed. The remainder of the portfolio was actively managed and diversified across a broad array of capitalization ranges and investment styles, including the Small-Cap Alpha Pool (S-CAP) and the Alpha Overlay program. Both programs represent multimanager pools of assets managed within the overall PSRS/PEERS U.S. Public Equity structure. The S-CAP Program encompasses all small capitalization assets. The Alpha Overlay composite focuses on the separation of returns into alpha and beta, and encompasses alternative equity mandates including hedge fund portfolios.

Exposure to the various segments of the domestic equity market (i.e., growth-oriented, value-oriented, and core) and to the approved investment strategy types are achieved through the identification, selection and ongoing management of SEC-registered investment advisors qualified to serve as fiduciaries to the Systems.

The pie charts below depict the U.S. Public Equity portfolio by presenting the current style structure of the portfolio as well as the allocation by composite and market sector.





Internal staff maintained a substantial overweight to U.S. public equities during the fiscal year. All investment strategies within the U.S. Public Equity program provided strong absolute returns. The U.S. Large cap strategy returned 22.4%, Alpha Overlay returned 24.3% and the S-CAP program returned 24.2% for the fiscal year.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> The reported returns are for PSRS but are indicative of PEERS returns.

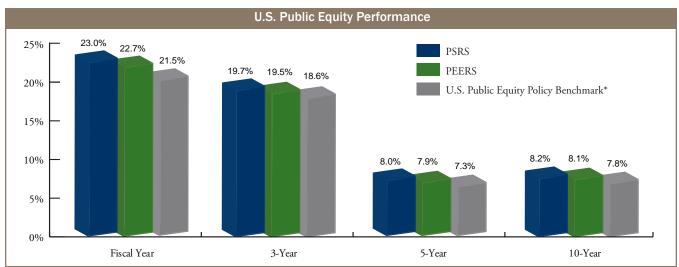
#### **Market Overview**

The U.S. stock markets had a very strong year across both market capitalization and styles as the broad measure of the U.S. stock market (Russell 3000 Index) increased by 21.5%. Small-cap stocks (Russell 2000 Index) increased by 24.2% for the year with large-cap value stocks (Russell 1000 Value Index) outperforming large-cap growth stocks (Russell 1000 Growth Index) with a return of 25.2% compared to 17.1%.

#### **Performance**

The total returns for the PSRS and PEERS U.S. Public Equity programs were 23.0% and 22.7%, respectively, compared to the benchmark return of 21.5% for the fiscal year ended June 30, 2013. As shown in the table and graph below, the PSRS and PEERS annualized U.S. equity composite returns outperformed the benchmark by 150 basis points and 120 basis points, respectively. The positive performance of the portfolio relative to the policy benchmark indicates value added by the internal staff through both strategic asset allocation decisions and manager selection decisions. Active management strategies contributed significantly to the outperformance, with the Alpha Overlay program exceeding its benchmark by more than 350 basis points for the year for both PSRS and PEERS.

As indicated in the table and graph, both PSRS and PEERS outperformed the benchmark by 110 basis points and 90 basis points, respectively, for the three-year time period. The U.S. public equity composites for PSRS and PEERS also outperformed the benchmark for the five and 10-year time periods. Over longer periods of time, the Systems' U.S. Public Equity portfolio is designed to deliver approximately 50-100 basis points of excess return through a combination of active and passive investment strategies.



U.S. Public Equity Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	10-Year
Annualized PSRS Return	23.0%	19.7%	8.0%	8.2%
Annualized PEERS Return	22.7%	19.5%	7.9%	8.1%
Annualized Policy Benchmark Return*	21.5%	18.6%	7.3%	7.8%
Excess Return†	1.5%	1.1%	0.7%	0.4%

\*The U.S. Public Equity policy benchmark is the Russell 3000 Index. †PSRS excess return relative to the U.S. Public Equity policy benchmark.

#### **Statistics**

The following table displays the statistical characteristics of the PSRS/PEERS U.S. Public Equity program as of June 30, 2013 with comparisons shown to the portfolio's policy benchmark (Russell 3000 Index).

U.S. Public Equity Characteristics			
Characteristics	June 30, 2013 Combined Systems*	June 30, 2013 Russell 3000 Index	
Number of Securities	1,416	2,923	
Dividend Yield	2.1%	2.1%	
Price-to-Earnings Ratio	18.3	16.8	
Avg. Market Capitalization	\$74.6 bil.	\$88.7 bil.	
Price-to-Book Ratio	2.5	2.3	

<sup>\*</sup> Includes only actively managed separate accounts A complete list of portfolio holdings is available upon request.

U.S. Public Equity - Top 10 Holdings			
Top 10 Largest Holdings* June 30, 2013	Combin Market Val	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Exxon Mobil Corp.	\$ 80,039,1	.68 0.7%	
Johnson and Johnson	57,770,0	0.6%	
Chevron Corp.	57,332,4	0.5%	
Edison International, Inc.	53,838,0	0.5%	
Amgen, Inc.	52,840,0	0.5%	
JP Morgan Chase and Co.	49,573,8	322 0.5%	
Wal-Mart Stores, Inc.	47,357,0	0.4%	
Wells Fargo and Co.	45,778,5	0.4%	
AmerisourceBergen Corp.	44,308,1	.95 0.4%	
Pfizer, Inc.	42,586,8	380 0.4%	
TOTAL	\$ 531,424,2	4.9%	

<sup>\*</sup> Includes only actively managed separate accounts
A complete list of portfolio holdings is available upon request.

#### **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had contracts with 13 external investment advisors who manage 23 portfolios that comprise 77.2% of the U.S. Public Equity portfolio. The remaining 22.8% of the portfolio is in the Alpha Overlay program described in the next section.

In fiscal year 2013, additional S-CAP mandates were added for NISA Investment Advisors, Allianz and RBC Global Asset Management. One investment advisor was terminated from their S-CAP mandates.

U.S.	Public Equity Investment Advisors		
		Combined Portfolio	
		Market Value*	% of Total
Investment Advisor	Investment Style	As of June 30, 2013	Market Value
Analytic Investors	Structured Large Cap Value	\$ 261,930,731	0.8%
Analytic Investors	U.S. Low Volatility Equity	854,905,390	2.6%
AQR Capital Management	Large Cap 140/40 Core	415,992,941	1.2%
Aronson + Johnson + Ortiz	Active Large Cap 130/30 Value	306,494,658	0.9%
Aronson + Johnson + Ortiz	Active Large Cap Value	474,658,660	1.4%
Blackrock - Russell 1000 Index Fund	Passive Russell 1000 Index	2,311,543,693	6.9%
Blackrock - Russell 1000 Growth Index Fund	Passive Russell 1000 Growth Index	588,806,971	1.8%
Blackrock - S&P 500 Index Fund	Passive S&P 500 Index	352,550,104	1.0%
Martingale Asset Management	Active Large Cap 130/30 Growth	237,982,082	0.7%
NISA Investment Advisors	Diversified Beta	293,594,414	0.9%
Westwood Management	Active Large Cap Value	471,146,743	1.4%
Westwood Management	Master Limited Partnerships	291,748,639	0.9%
Zevenbergen Capital	Active All Cap Growth	499,529,685	1.5%
S-CAP: Allianz	Active Micro Cap Growth	112,166,594	0.3%
S-CAP: Allianz	Active Ultra Micro Cap Growth	30,416,440	0.1%
S-CAP: AQR Capital Management	Active Small Cap Value	185,114,245	0.5%
S-CAP: Chartwell Investment Partners	Active Small Cap Value	181,209,428	0.5%
S-CAP: Columbus Circle	Active Small Cap Growth	140,535,896	0.4%
S-CAP: Next Century Growth Investors	Active Small Cap Growth	58,869,606	0.2%
S-CAP: Next Century Growth Investors	Active Micro Cap Growth	16,344,595	0.0%
S-CAP: NISA Investment Advisors	Russell 2000 Exposure	164,470,292	0.5%
S-CAP: NISA Investment Advisors	Russell 2000 Value Exposure	35,950,514	0.1%
S-CAP: RBC Global Asset Management	Active Small Cap Core	155,038,456	0.5%
Small Cap Alpha Pool (S-CAP) Subtotal		1,080,116,066	3.1%
Total		\$ 8,441,000,777	25.1%

<sup>\*</sup>Includes manager cash

## ALPHA OVERLAY PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Alpha Overlay allocation had a market value of approximately \$2.5 billion, representing 7.6% of total assets.

## **Investment Program Description**

The Alpha Overlay portfolio resides within the U.S. Large-Cap Equity program. The Alpha Overlay portfolio has been constructed to assist in meeting the long-term goals established for the overall U.S. Large-Cap Equity allocation. Specifically, Alpha Overlay provides broad exposure to large-cap U.S. stocks using S&P 500 total return swaps, while the returns of a select portfolio of hedge fund strategies provides the opportunity to earn excess returns above the passive S&P 500 Index. By combining the market exposure obtained through the S&P 500 total return swaps with the diversified exposures to investment strategies focused on alpha generation, the combined portfolio is constructed and managed to produce a return stream with volatility and beta characteristics similar to the passive S&P 500 Index, while generating excess returns (or alpha) of approximately 200-250 basis points over longer periods of time.

#### **Structure**

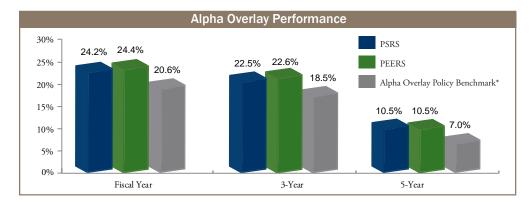
As of June 30, 2013, 30.9% of the PSRS/PEERS Alpha Overlay composite assets were passively managed by NISA Investment Advisors using S&P 500 total return swaps to attain equitization. An additional 65.0% of the portfolio was actively managed across a diversified range of multi-strategy and market neutral hedge fund mandates. The remaining 4.1% of the portfolio was actively managed by Zevenbergen Capital in a long-only mandate. There were no investment advisor changes during fiscal year 2013. The chart below displays the specific investment advisor exposure within the composite as of June 30, 2013.

Alpha Overlay Investment Advisors			
Investment Advisor	Investment Style	Combined Portfolio Market Value* As of June 30, 2013	% of Total Value
Algert Coldiron Investors	Multi-Strategy Market Neutral	\$ 128,670,890	0.4%
Analytic Investors	Japan Market Neutral	35,076,756	0.1%
AQR Capital Management	Multi-Strategy	120,744,986	0.4%
Bridgewater Associates	Multi-Strategy	257,174,598	0.8%
Carlson Capital Management	Multi-Strategy	197,396,580	0.6%
Davidson Kempner	Multi-Strategy	277,558,013	0.8%
NISA Investment Advisors	S&P 500 Exposure	772,641,039	2.3%
Och-Ziff	Multi-Strategy	144,970,152	0.4%
Och-Ziff Asia	Multi-Strategy	17,527,187	0.1%
Och-Ziff Europe	Multi-Strategy	20,327,342	0.1%
Renaissance	Equity Long/short	168,904,856	0.5%
Stark Investments	Equity Long/short	7,575,976	0.0%
UBS O'Connor	Global Market Neutral	84,327,826	0.3%
UBS O'Connor	Multi-Strategy	164,226,378	0.5%
Zevenbergen Capital	Active All-Cap Growth	101,021,952	0.3%
Total		\$ 2,498,144,531	7.6%

<sup>\*</sup> Includes manager cash

#### **Performance**

The total returns for PSRS' and PEERS' Alpha Overlay programs were 24.2% and 24.4%, respectively, compared to the benchmark return of 20.6% for the fiscal year ended June 30, 2013. As shown in the table and graph below, the PSRS and PEERS Alpha Overlay composite returns substantially exceeded the benchmark while maintaining a risk profile (standard deviation and beta) similar to that of the benchmark over longer time periods. The Alpha Overlay program outperformed the benchmark in excess of 350 basis points over all time periods shown below.



Alpha Overlay Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	
Annualized PSRS Return	24.2%	22.5%	10.5%	
Annualized PEERS Return	24.4%	22.6%	10.5%	
Annualized Policy Benchmark Return*	20.6%	18.5%	7.0%	
Excess return†	3.6%	4.0%	3.5%	
Annualized Standard Deviation of Composite	7.2%	13.5%	18.3%	
Annualized Standard Deviation of Policy Benchmarl	κ* 6.7%	13.6%	18.4%	
Beta to Benchmark*	1.06	0.99	0.98	

<sup>\*</sup>The Alpha Overlay Policy Benchmark is the S&P 500 Index. Ten-year returns are not available due to the age of the asset class. †PSRS excess return relative to the Alpha Overlay policy benchmark

## **GLOBAL PUBLIC EQUITY PROGRAM SUMMARY**

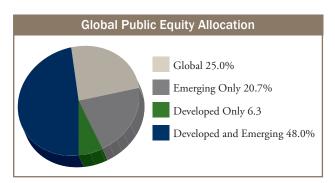
As of June 30, 2013, the combined PSRS/PEERS Global Public Equity assets had a market value of approximately \$5.1 billion, representing 15.3% of total assets.

## **Investment Program Description**

The Global Public Equity program provides long-term capital appreciation in excess of inflation and dividends through exposure to public equity securities on a global basis. Specific investment strategies approved for the Global Public Equity program include passive investment vehicles, traditional long-only active equity management and active long/short approaches. Exposure to the various segments of the global equity market (i.e., U.S., developed non-U.S., emerging, growth-oriented, value-oriented, and core) and to the approved investment strategy types are achieved through the identification, selection and ongoing management of SEC-registered investment advisors qualified to serve as fiduciaries to the Systems. The global portfolios provide an element of diversification relative to the domestic equity portfolios. Currency is another aspect of international investing that can impact the performance and volatility of the asset class over the short-term, however, over the long-term the effect from currency is expected to be neutral.

## **Structure**

As of June 30, 2013, 24.6% of the PSRS/PEERS Global Public Equity composite was passively managed. The remainder of the portfolio was actively managed and diversified across capitalization ranges, styles and a number of developed and emerging market countries. The bar graph displays the specific country exposure within the composite while the pie chart indicates broader exposure by investment mandate.

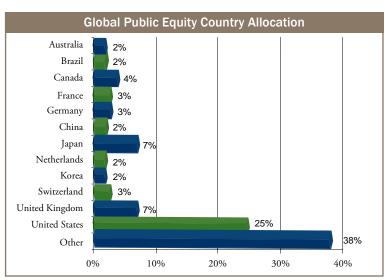


Internal staff made significant adjustments to the composite prior to the start of the fiscal year. These changes provided immediate added value during the fiscal year with the PSRS and PEERS annualized Global Public Equity composite returns outperforming the benchmark by 330 and 370 basis points, respectively. Significant changes included the termination of multiple active managers while deploying new assignments for both active and passive mandates.

#### **Market Overview**

The global stock markets had a strong year across developed equity markets. The broad measure for developed international markets (MSCI EAFE Index) increased 18.6%, emerging markets (MSCI EM Index) increased 2.9% and global stocks (MSCI World) increased 18.6%.

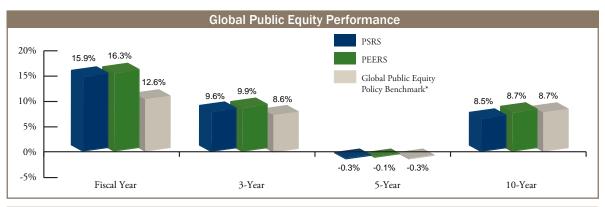
Global markets benefited from increased political and economic stability in Europe due to positive developments in both the Eurozone bank union and Greek debt crisis.



#### **Performance**

The total returns for the PSRS and PEERS Global Public Equity programs were 15.9% and 16.3%, respectively, compared to the benchmark return of 12.6% for the fiscal year ended June 30, 2013. As shown in the table and graph below, the PSRS and PEERS annualized Global Public Equity composite returns outperformed the benchmark by 330 and 370 basis points, respectively.

For the three-year time period, PSRS and PEERS outperformed the benchmark by 100 basis points and 130 basis points, respectively. The Systems' five- and 10-year returns were in line with the benchmark returns.



Global Public Equity Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	10-Year
Annualized PSRS Return	15.9%	9.6%	-0.3%	8.5%
Annualized PEERS Return	16.3%	9.9%	-0.1%	8.7%
Annualized Policy Benchmark Return*	12.6%	8.6%	-0.3%	8.7%
Excess Return†	3.3%	1.0%	0.0%	-0.2%

<sup>\*</sup>The Global Equity policy benchmark is the MSCI All Country World ex-U.S. Free Index.

†PSRS excess return relative to the Global Equity policy benchmark

Global Public Equity - Top 10 Holdings				
Top 10 Largest Holdings*	Combined	% of Total		
June 30, 2013	Market Value G	lobal Public Equity		
HSBC Holdings	\$ 34,515,939	0.7%		
Bayer AG	32,360,090	0.6%		
Nestle SA	30,097,427	0.6%		
Roche Holdings AG	29,425,979	0.6%		
ING Group	24,059,926	0.5%		
Samsung Electronics Co. Ltd.	23,814,169	0.5%		
Honda Motor Co.	23,318,981	0.5%		
Danone	23,115,879	0.4%		
Denso Corp.	22,030,015	0.4%		
Linde AG	21,008,543	0.4%		
Total	\$ 263,746,948	5.2%		

<sup>\*</sup> Includes only actively managed separate accounts

 $A\ complete\ list\ of\ portfolio\ holdings\ is\ available\ upon\ request.$ 

#### **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had contracts with 11 external investment advisors who manage 15 portfolios within the Global Public Equity portfolio. In fiscal year 2013, new active management mandates were added with Arrowstreet Capital and MFS Investment Management and a new passive assignment was added to NISA Investment Advisors. An active global manager, an active international manager and an active emerging market manager were terminated.

Global Public Equity Investment Advisors				
		Combined Portfolio		
		Market Value*	% of Total	
Investment Advisor	Investment Style	As of June 30, 2013	Market Value	
Acadian Asset Management	Active Emerging Markets	\$ 189,842,196	0.5%	
AllianceBernstein Institutional Mgmt.	Active Intl. Value	333,781,599	1.0%	
Analytic Investors	Active Global	537,628,126	1.6%	
AQR Capital Management	Active Intl. Core	429,675,915	1.3%	
Arrowstreet Capital	Active Emerging Markets	137,399,500	0.4%	
Arrowstreet Capital	Active Global	387,812,300	1.2%	
Arrowstreet Capital	Global Long/Short	352,641,748	1.1%	
Blackrock - MSCI ACWI ex-US Index	Passive Intl. Core	668,582,328	2.0%	
MFS Investment Management	Active Intl. Core	639,315,444	1.9%	
MFS Investment Management	Active Intl. Core	109,446,940	0.3%	
Neon Capital Management	Active Emerging Markets	63,547,857	0.2%	
NISA Investment Advisors	EAFE Swaps	319,316,165	1.0%	
NISA Investment Advisors	ACWI Swaps	269,175,575	0.8%	
Rock Creek Group	Active Emerging Markets	486,480,947	1.5%	
Russell Investments	Active Emerging Markets	181,212,835	0.5%	
Transition accounts	Transition accounts	8,101,626	0.0%	
Total		\$ 5,113,961,101	15.3%	

<sup>\*</sup> Includes manager cash

# PUBLIC CREDIT PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Public Credit assets had a market value of approximately \$2.8 billion, representing 8.2% of total assets.

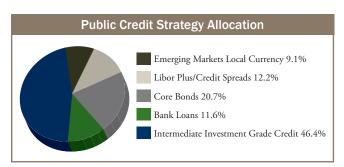
# **Investment Program Description**

The Public Credit program is designed to provide a source of income and capital appreciation for PSRS and PEERS while creating substantial diversification to the total plan with a low correlation to other asset classes. Most securities in this program exhibit high liquidity. Specific investments can include investment grade corporate securities, below investment grade debt instruments, distressed debt securities, convertible bonds, bank loans, agencies, mortgage-backed securities, assetbacked securities and interest rate sensitive securities (including those issued or guaranteed by the United States government or its agencies). Investments in this program may include debt of both U.S. and non-U.S. issuers.

The performance objective for the Public Credit program is to exceed the returns of the investment grade credit markets through the use of a wide variety of active management approaches while incurring a level of risk that is generally consistent with the policy benchmark (Barclays Capital Intermediate Credit Index).

#### **Structure**

As of June 30, 2013, the Public Credit composite was actively managed and diversified across high quality corporate bonds, bank loans and non-dollar currencies of both developed and emerging countries. The pie chart below presents the strategy allocation of the Systems' Public Credit assets as of June 30, 2013.



The target allocation for the Public Credit program is 12.0% and the Systems' allocation at the end of the fiscal year was 8.2%. Within the Public Credit composite, the Systems' internal staff has built a diversified portfolio with a base of 46% in high quality, shorter duration corporate bonds. The most significant position outside of the core bond allocation was to non-U.S. dollar bonds (and foreign currencies) due to an expectation that the U.S. dollar would decline over the medium term.

#### **Market Overview**

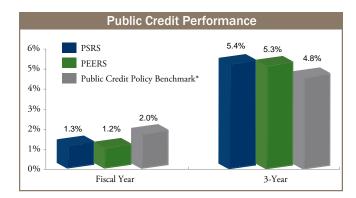
The yield on the 10-year Treasury increased from 1.65% on June 30, 2012 to 2.48% on June 30, 2013. The significant increase in interest rates throughout the year negatively impacted the price of bonds.

Investment grade credit corporate bonds (Barclays Capital Intermediate Credit Index) increased 2.0% for the year while a broader measure of the U.S. bond market (Barclays Capital Aggregate Index) decreased 0.7%. High yield, or lower quality, bonds (Bank of America Merrill Lynch High Yield Master II Index) increased 9.6% for the year, global bonds (Barclays Capital Global Bond Index) decreased 3.4%, and emerging market bonds (JP Morgan Emerging Market Bond Index) increased 1.1%.

#### **Performance**

The total returns for the PSRS and PEERS Public Credit programs were 1.3% and 1.2%, respectively, compared to the benchmark return of 2.0% for the fiscal year ended June 30, 2013. As indicated in the table and graph on the following page, both PSRS and PEERS outperformed the benchmark for the three-year time period.

Active management strategies (manager selection decisions) detracted from the return of the Public Credit Portfolio. Allocations to longer duration securities negatively impacted performance due to an increase in interest rates over the fiscal year. The Oaktree bank loan portfolio and the PIMCO LIBOR Plus portfolios provided solid absolute and relative returns for the fiscal year, gaining 7.5% and 7.3%, respectively.



Public Credit Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year		
Annualized PSRS Return	1.3%	5.4%		
Annualized PEERS Return	1.2%	5.3%		
Annualized Policy Benchmark Return*	2.0%	4.8%		
Excess Return†	-0.7%	0.6%		

<sup>\*</sup>The Public Credit policy benchmark is the Barclays Capital Intermediate Index. †PSRS excess return relative to the Public Credit policy benchmark

# Top 10 Holdings

The following table displays the top 10 Public Credit holdings as of June 30, 2013.

Public Credit - To	op 10 Holdings	
Top 10 Largest Holdings* June 30, 2013	% Combined Market Value	of Total Public Credit
PIMCO Developing Local Markets Fund	\$ 250,094,656	9.1%
PIMCO Short Term Floating NAV II Fund	170,606,567	6.2%
United States Treasury Strip, 3.875%, 8/15/40	74,970,845	2.7%
United States Treasury Strip, 4.375%, 5/15/40	56,701,411	2.1%
United States Treasury Note, 4.500%, 7/18/13	54,804,452	2.0%
United Parcel Service Inc., 5.125%, 4/1/19	34,495,500	1.2%
Fannie Mae, 4.000%, 8/1/14	29,523,788	1.1%
EMC Corporation, 3.375%, 6/1/23	28,903,768	1.0%
Verizon Wireless, 8.500%, 11/15/18	28,307,346	1.0%
Nevada Power Company, 7.125%, 3/15/19	27,746,208	1.0%
Total	\$ 756,154,541	27.4%

<sup>\*</sup>Includes only actively managed accounts. A complete list of portfolio holdings is available upon request.

#### **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had contracts with three external investment advisors who manage five portfolios in the Public Credit portfolio. There were no changes in manager assignments during the fiscal year.

	Public Credit Investment Advisors			
Investment Advisor	Investment Style	_	Combined Market Value* of June 30, 2013	% of Total Market Value
NISA Investment Advisors	Corporate Credit	\$	1,278,757,966	3.8%
Oaktree Bank Loans	Senior Bank Loans		320,161,948	1.0%
Pacific Investment Management Co.	Core Plus		570,879,230	1.7%
Pacific Investment Management Co.	LIBOR Plus		337,585,987	1.0%
Pacific Investment Management Co.	Developing Local Markets		250,094,659	0.7%
Total		\$	2,757,479,790	8.2%

<sup>\*</sup>Includes manager cash

The Public Credit Program was established in December 2008, so five- and 10-year returns are not available.

# HEDGED ASSETS PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Hedged Assets portfolio had a market value of approximately \$4.7 billion, representing 14.1% of total assets.

# **Investment Program Description**

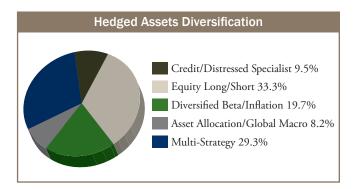
The Hedged Assets program's objective is to provide diversification to the total portfolio and reduce volatility within the Public Risk composite. The purpose of this program is to enhance the overall risk/return profile of the Public Risk composite through the inclusion of specialized investment strategies that typically generate returns in a different fashion (i.e., absent a high correlation to equities or bonds). These strategies may utilize leverage as allowed within their governing documents. The returns from these strategies have historically had a low-to-moderate correlation with the traditional equity markets, thus providing diversification benefits in addition to portfolio return enhancement. These strategies seek to control risks and maintain a focus on absolute returns. The inherent nature of these vehicles to serve as a "hedge" provides for the expectation that the Program will lag the equity market during times when equities are performing above the long-term averages. However, when equities are performing below the long-term averages, the program would be expected to outperform the equity market. In addition, managers within this asset class have historically possessed significantly lower volatility relative to traditional equity managers.

#### Structure

In December 2005, the Systems hired Albourne America, LLC (Albourne) as its hedge fund Consultant. Albourne is an independent global advisory firm focused mainly on hedge funds. As the Systems ramped-up investments in alternatives, it was determined that direct investments into hedge funds would be utilized, as opposed to incorporating fund-of-funds. The System's internal staff believed that the benefits of direct investments, including lower fees, customized portfolio exposures, direct access to manager knowledge, and higher levels of transparency, outweighed the benefit of quicker implementation offered by fund-of-funds. Using this approach, the Systems hired their first hedge fund manager in January 2007.

As the chart below indicates, the Hedged Assets program is diversified into Multi-Strategy Managers, Asset Allocation/Global Macro, Diversified Beta/Inflation, Credit/Distressed Specialists and Equity Long/Short. Multi-Strategy managers include those focused on event-driven, credit and relative value. The Systems manage the Hedged Assets portfolio to a blended benchmark of 25% Russell 3000 Index, 25% MSCI All Country World Free Ex-U.S. Index and 50% Barclays Capital Intermediate Credit Index.

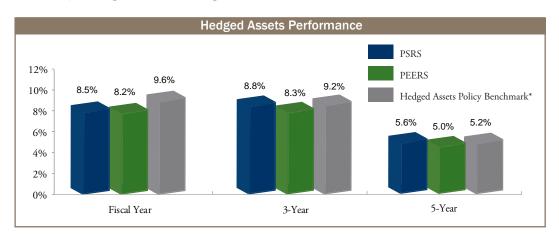
Internal staff's decision to overweight Hedged Assets relative to Safe Assets and Public Credit added significant value to the Systems.



#### **Performance**

The total annualized returns on the PSRS and PEERS Hedged Assets portfolios for the fiscal year were 8.5% and 8.2%, respectively. The one-year returns were strong absolute returns but trailed the policy benchmark.

For the three-year time period, PSRS and PEERS underperformed the benchmark. For the five-year time period, PSRS outperformed the benchmark by 40 basis points and PEERS slightly underperformed the benchmark. As the table indicates, the longer term performance was accomplished by assuming less than one-half of the volatility of the world stock index (MSCI All Country World Index) and achieving a beta of approximately .40 to the index, signifying that the Systems' portfolios move up or down less than half as much as the world stock index.



Hedged Assets Fiscal Year Statistical Performance					
Portfolio Characteristics	Fiscal Year	3-Year	5-Year		
Annualized PSRS Return	8.5%	8.8%	5.6%		
Annualized PEERS Return	8.2%	8.3%	5.0%		
Annualized Policy Benchmark Return*	9.6%	9.2%	5.2%		
Annualized S&P 500 Return	20.6%	18.5%	7.0%		
Annualized MSCI AC World Index Return	16.6%	12.4%	2.3%		
Annualized Standard Deviation of Composite**	5.4%	7.1%	8.7%		
Annualized Standard Deviation of Policy Benchmark**	4.5%	8.6%	12.2%		
Annualized Standard Deviation of S&P 500**	6.7%	13.6%	18.4%		
Annualized Standard Deviation to ACWI World Index**	7.0%	15.9%	20.9%		
Beta to Policy Benchmark**	1.17	0.76	0.64		
Beta to S&P 500**	0.51	0.44	0.39		
Beta to ACWI World Index**	0.70	0.40	0.36		

<sup>\*</sup>The Hedged Assets policy benchmark is composed as follows: 50% Barclays Credit Intermediate, 25% MSCI ACWI ex U.S. (Net), 25% Russell 3000 Index.

<sup>\*\*</sup> Risk statistics are calculated on the PSRS portfolio but are indictive of the PEERS portfolio.

# **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had contracts with 17 external investment advisors who managed 27 portfolios.

The Systems added one investment mandate with Westwood Management to the portfolio during fiscal year 2013 and terminated two relationships.

	Hedged Assets Investment Advisors		
		Combined Portfolio	ov Crrs 1
Investment Advisor	Investment Style	Market Value* As of June 30, 2013	% of Total Market Value
AQR Absolute Return Fund	Multi-Strategy	\$ 120,744,985	0.4%
AQR Diversified Beta Fund	Diversified Beta/Inflation	354,894,837	1.1%
AQR Real Asset Fund	Multi-Strategy	87,003,868	0.3%
Bridgewater All Weather	Equity Long/short	379,834,507	1.1%
Bridgewater Inflation Pool	Diversified Beta/Inflation	144,966,111	0.4%
Bridgewater Pure Alpha II	Asset Allocation/Global Macro	113,974,466	0.3%
Bridgewater Pure Alpha Major Markets	Asset Allocation/Global Macro	274,194,853	0.8%
Carlson Black Diamond	Multi-Strategy	143,424,122	0.4%
Davidson Kempner	Multi-Strategy	127,517,960	0.4%
Davidson Kempner	Distressed Debt/Credit	134,947,280	0.4%
GoldenTree Asset Management	Distressed Debt/Credit	315,525,182	0.9%
Indus Capital Partners	Equity Long/short	120,333,237	0.4%
Karsch Capital Management	Equity Long/short	121,070,176	0.4%
Karsch Capital Management	Equity Long/short	263,435,849	0.8%
Maverick Capital	Equity Long/short	132,879,905	0.4%
NISA Investment Advisors	Diversified Beta/Inflation	338,929,873	1.0%
NISA Investment Advisors	Diversified Beta	59,841,673	0.2%
Och-Ziff Domestic Partners	Multi-Strategy	168,726,848	0.5%
Och-Ziff Europe	Multi-Strategy	37,750,777	0.0%
Och-Ziff Asia	Multi-Strategy	157,744,678	0.5%
Owl Creek Overseas Fund	Multi-Strategy	117,916,249	0.4%
Pershing Square	Equity Long/short	231,081,431	0.7%
Renaissance	Equity Long/short	313,680,447	0.9%
Stark Investments	Equity Long/short	14,069,670	0.0%
UBS O'Connor	Multi-Strategy	118,922,527	0.5%
Westwood Management	Diversified Beta/Inflation	30,967,247	0.1%
York Capital	Multi-Strategy	305,623,069	0.8%
Total		\$ 4,730,001,827	14.1%

<sup>\*</sup>Includes manager cash

# SAFE ASSETS CLASS SUMMARY

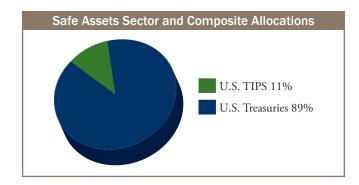
As of June 30, 2013, the combined PSRS/PEERS Safe Assets had a market value of approximately \$4.5 billion, representing 13.3% of total assets.

# **Investment Program Description**

The Safe Assets program is intended to act as a source of safety and income for PSRS and PEERS. The program is designed to create substantial diversification to the total portfolio and reduce volatility through low correlation to other asset classes. Specifically, the Safe Assets portfolio should provide asset protection at the total fund level in periods of economic stress. The policy benchmark for the Safe Assets allocation is 80% Barclays Capital U.S. Treasury Blended Index (a combination of the Barclays Capital Treasury Intermediate Index and the Barclays Capital Treasury Long Index) and 20% Barclays Capital U.S. TIPS 1-10 Year Index.

#### **Structure**

As of June 30, 2013, the Systems' entire Safe Assets program was actively managed by NISA Investment Advisors. The assets held within the program exhibit high liquidity and safety. The pie chart on this page depicts the PSRS and PEERS Safe Assets program by showing the sector and composite allocations as of June 30, 2013.



Internal staff strategically underweighted the allocation to Safe Assets during the year. Internal staff continues to maintain an underweight to Safe Assets due in part to historically low yields on both U.S. Treasuries and TIPS and due to better expected risk/adjusted returns going forward within the Public Risk program. The Systems' allocation to Safe Assets was 13.3% as of June, 30, 2013, as compared to the benchmark weight of 20%. However, as yield expectations change the internal staff makes strategic shifts within the programs.

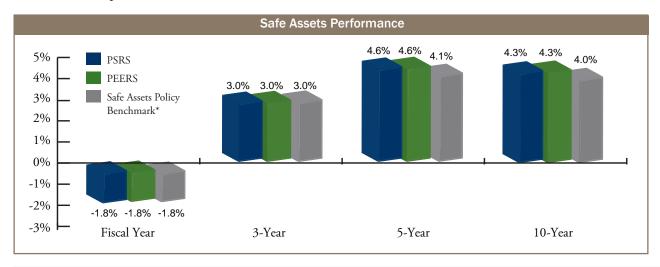
#### **Market Overview**

The yield on the 10-year Treasury increased from 1.65% on June 30, 2012 to 2.48% on June 30, 2013. The significant increase in interest rates throughout the year negatively impacted the price of bonds.

#### **Performance**

The total returns for the PSRS and PEERS Safe Asset portfolios equaled the benchmark return of -1.8% for the fiscal year ended June 30, 2013. For the three-year time period, the Systems' performance equaled the Safe Assets benchmark. Both Systems outperformed the Safe Assets benchmark by 50 basis points for the five-year time period and by 30 basis points for the 10-year time period.

The absolute return of the Safe Assets portfolio is relatively modest over longer time periods. However, the Safe Assets portfolio continues to provide asset protection at the total fund level in periods of economic stress and ultimate liquidity to PSRS and PEERS. An allocation to Safe Assets allows the Systems to accept market risk in other portions of the total fund portfolio.



Safe Assets Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	10-Year
Annualized PSRS Return	-1.8%	3.0%	4.6%	4.3%
Annualized PEERS Return	-1.8%	3.0%	4.6%	4.3%
Annualized Policy Benchmark Return*	-1.8%	3.0%	4.1%	4.0%
Excess Return†	0.0%	0.0%	0.5%	0.3%
Annualized Standard Deviation of Composite**	2.8%	3.1%	3.8%	3.7%
Annualized Standard Deviation of Policy Benchmark**	2.8%	3.1%	3.9%	3.8%
Beta to Policy Benchmark**	0.99	0.98	0.97	0.98
Beta to ACWI World Index**	0.13	-0.07	0.00	-0.02

<sup>\*</sup>The Safe Assets policy benchmark is composed as follows: 80% Barclays Capital Treasury Intermediate Index and 20% Barclays Capital U.S. TIPS 1-10 Yrs. Index.

The table indicates that the Systems have taken similar risk to the policy benchmark (as measured by standard deviation) over most time periods, while achieving higher returns; indicating strong risk-adjusted performance. Additionally, the Systems' portfolios have a beta slightly less than 1.0 relative to the policy benchmark over all time periods, indicating less market volatility. Most importantly, the Safe Asset portfolio exhibits a beta of approximately zero relative to the world stock index (MSCI All Country World Index), indicating no correlation to risk assets. This statistic supports one of the primary objectives of Safe Assets: diversification from other risk assets in the total fund.

<sup>\*\*</sup>Risk statistics are calculated on the PSRS portfolio but are indicative of the PEERS portfolio.

<sup>†</sup>PSRS excess return relative to the Safe Assets policy benchmark

# **Top 10 Holdings and Characteristics**

The following table displays the statistical characteristics of the Systems' Safe Assets Program as of June 30, 2013 with comparisons shown to the Barclays Capital Intermediate U.S. Treasury Index. Additionally, the top 10 Safe Asset holdings as of June 30, 2013 are shown in the table below the characteristics.

Safe Assets Characteristics				
_	e 30, 2013 Combined Systems*	June 30, 2013 Barclays Capital Intermediate U.S. Treasury Index		
Number of Securities	80	194		
Average Coupon	2.4%	1.8%		
Yield to Maturity	1.0%	1.0%		
Average Maturity (Years)	6.3	3.9		
Duration (Years)	5.2	3.7		

Safe Assets - To	op 10 Holdings	
Top 10 Largest Holdings*	Combined	% of Total
June 30, 2013	Market Value	Safe Assets
United States Treasury Note, 1.25%, 10/31/15	\$ 239,244,796	5.4%
United States Treasury Note, 0.25%, 2/28/14	216,560,136	4.9%
United States Treasury Note, 3.50%, 5/15/20	215,701,160	4.8%
United States Treasury Note, 2.75%, 10/31/13	206,469,049	4.6%
United States Treasury Note, 2.375%, 10/31/14	205,657,717	4.6%
United States Treasury Note, 2.00%, 4/30/16	164,774,467	3.7%
United States Treasury Note, 3.00%, 9/30/16	155,462,288	3.5%
United States Treasury Note, 2.125%, 5/31/15	146,143,179	3.3%
United States Treasury Note, 2.875%, 5/15/43	144,803,700	3.3%
United States Treasury Note, 0.75%, 12/15/13	141,603,687	3.2%
Total	\$ 1,836,420,179	41.3%

<sup>\*</sup>Includes only actively managed separate accounts

# **Investment Advisors**

NISA Investment Advisors managed the Safe Assets program as of June 30, 2013. The following table lists the firm's management by investment style.

	Safe Assets Investment Ad	visor		
Investment Advisor	Investment Style		mbined Portfolio Market Value* of June 30, 2013	% of Total Market Value
NISA Investment Advisors NISA Investment Advisors	U.S. Treasuries U.S. TIPS	\$	3,942,032,408 508,110,564	11.8% 1.5%
Total		\$	4,450,142,972	13.3%

<sup>\*</sup>Includes manager cash

 $A\ complete\ list\ of\ portfolio\ holdings\ is\ available\ upon\ request.$ 

# PRIVATE RISK ASSETS CLASS SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Private Risk assets had a market value of approximately \$5.3 billion, representing 15.9% of total assets.

# **Investment Program Description**

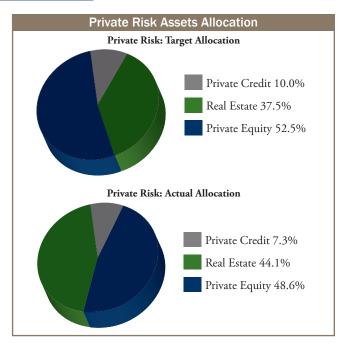
The allocation to Private Risk investments is viewed as a separate asset class for inclusion in the Systems' overall investment portfolios. The process of building the Systems' Private Risk program and fully funding the target allocation is expected to occur over a period of several years. Additional new investments will be necessary beyond the initial start-up period in order to maintain the long-term 20.0% target allocation. The three programs within the Private Risk Assets composite are Private Equity, Private Real Estate and Private Credit. Each program within the Private Risk allocation is a separate multi-manager composite that is treated generally as a single portfolio. Each program serves a specific and distinct role within the overall Private Risk composite and also within the overall total plan allocation. Over time, the Private Risk composite serves as a long-term vehicle to supply the underlying beta exposure to a portfolio of private assets.

Investments in Private Risk Assets differ substantially from the Systems' public markets asset classes (Public Risk Assets and Safe Assets) in part because they are typically very long-term in nature, not publicly traded, relatively illiquid, and offer the potential for substantially higher returns (along with a commensurate level of risk). The illiquid nature of Private Risk Assets can result from the form of the asset or security itself, or it can be a function of the investment structure being utilized (e.g., a limited partnership).

Due to the fact that Private Risk Assets are not publicly traded, pricing and performance measurements prior to realization of gains are less reliable than in the traditional publicly traded asset classes. The Systems continually monitor the valuation policies and procedures utilized for such investments.

#### Structure

As of June 30, 2013, 48.6 % of the PSRS/PEERS Private Risk assets were invested in the Private Equity program, 44.1 % in the Private Real Estate program, and 7.3 % in the Private Credit program. Each of these programs is discussed in more detail on the following pages.



#### **Performance**

The total returns for the PSRS and PEERS Private Risk portfolios were 13.1% and 12.8%, respectively, compared to the policy benchmark return of 16.2% for the fiscal year ended June 30, 2013. For the three- and five-year time periods, PSRS and PEERS underperformed the benchmark as noted below. The underperformance for the time frames noted below are partially due to the pricing and performance methodology utilized for private assets. For instance, the Systems utilize a liquid benchmark (Russell 3000 Index) to measure an illiquid (private equity) asset class. Thus, there will be significant performance differences over short time periods in volatile markets.



Private Risk Assets Statistical Performance					
Portfolio Characteristics	Fiscal Year	3-Year	5-Year		
Annualized PSRS Return	13.1%	14.0%	2.7%		
Annualized PEERS Return	12.8%	14.0%	2.6%		
Annualized Policy Benchmark Return	* 16.2%	16.0%	6.3%		
Excess return†	-3.1%	-2.0%	-3.6%		

<sup>\*</sup>The Private Risk Assets policy benchmark is composed as follows: 52.5% Russell 3000 Index, 37.5% NCREIF Property Index and 10.0% Merrill Lynch High Yield Master II Index.

†PSRS excess return relative to the Private Risk Assets policy benchmark.

The Private Risk Assets composite was established more recently, so 10-year returns are not available.

# PRIVATE EQUITY PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Private Equity assets had a market value of approximately \$2.3 billion, representing 7.0% of total assets.

# **Investment Program Description**

The Private Equity asset class is comprised of investment opportunities not typically included within the public equity and fixed income markets. Private Equity investments provide financing for start-up companies, private middle market companies, firms in financial distress and public and non-public firms seeking buyout financing. Private Equity investments can be classified into three basic sub-asset class categories:

- Venture Capital
- Buyouts
- Debt-Related

Investments in the sub-asset classes can be made in the U.S. or foreign countries. In total, the allocation to Non-U.S. Private Equity investments will not exceed 40.0% of the overall Private Equity target allocation. The risks associated with Private Equity will be viewed both in isolation and within the context of the entire fund.

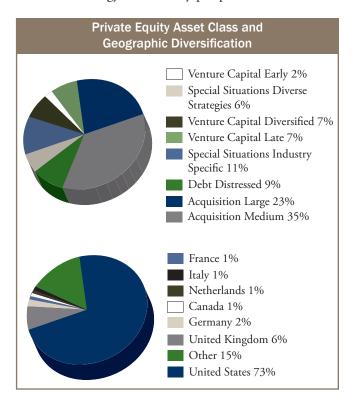
### **Structure**

As of June 30, 2013, the combined PSRS and PEERS Private Equity assets committed\* for investment were \$4.1 billion. The market value of funds that have been drawn down and actually invested as of June 30, 2013 was approximately \$2.3 billion, representing 7.0% of total assets. The Systems private equity investment commitments that have not yet been funded were approximately \$1.4 billion as of June 30, 2013.

The objective for the Systems' allocation to Private Equity is to achieve returns that are higher than those attainable in the public equity markets with the added benefit of diversification. The PSRS/PEERS target allocation to Private Equity is 10.5%. However, as of June 30, 2013, the actual allocation for the Systems was just 7.0% because the long-term and illiquid nature of the private equity asset class dictates that capital must be invested at a measured pace. Pathway Capital Management has been retained by the Systems to provide private equity

investment management services through two structures; a discretionary fund-of-funds relationship and an advisory relationship. Additionally, the Systems have invested in private equity secondary funds.

The pie charts below show the diversification (utilizing the market value of the assets that have been invested) of the Systems' private equity holdings as of June 30, 2013 from both strategy and country perspectives.



#### **Market Overview**

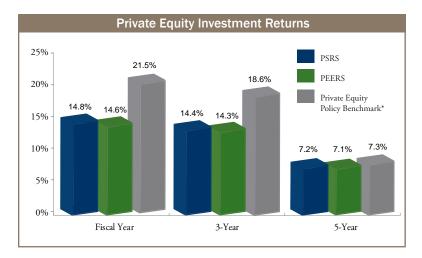
Most private equity funds performed well in fiscal year 2013. There were clear differences, however, among geographic regions, with the United States generally outperforming other regions across the key metrics of exit market activity, investment activity and fundraising activity. During the year, many U.S. private equity-backed companies were able to take advantage of the robust credit markets to refinance existing debt, reduce interest expense, extend maturities or finance stock buybacks or dividends.

<sup>\*</sup> Committed capital reflects the total amount of capital that the Systems are legally obligated to supply to the partnerships and funds as the capital is needed to invest in underlying holdings. Market value reflects capital that has actually been drawn and invested by the partnerships and funds.

#### **Performance**

The total returns for the PSRS and PEERS Private Equity programs were 14.8% and 14.6%, respectively, compared to the benchmark return of 21.5% for the fiscal year ended June 30, 2013. The underperformance for the one- and three-year time frames noted below is partially due to the pricing and performance methodology utilized for private assets. The Systems utilize a liquid benchmark (Russell 3000 Index) to measure an illiquid (private equity) asset class. Thus, there will be significant performance differences over short time periods in volatile markets.

Due to the long term nature of the asset class, the performance of a private equity portfolio can be more appropriately judged over a longer timeframe. As the table below indicates, the PSRS and PEERS Private Equity portfolio has produced strong absolute returns over all time periods.



Private Equity Statistical Performance					
Portfolio Characteristics	Fiscal Year	3-Year	5-Year		
Annualized PSRS Return	14.8%	14.4%	7.2%		
Annualized PEERS Return	14.6%	14.3%	7.1%		
Annualized Policy Benchmark Return	* 21.5%	18.6%	7.3%		
Excess Return†	-6.7%	-4.2%	-0.1%		

<sup>\*</sup>The Private Equity policy benchmark is the Russell 3000 Index.

<sup>†</sup>PSRS excess return relative to the Private Equity policy benchmark.

The Private Equity program was established in March 2003, therefore 10-year returns are not available.

#### **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had committed to 69 separate partnerships with 41 firms within the Private Equity asset class. In fiscal year 2013, PSRS and PEERS committed to five new partnerships for \$209 million. Additionally, the Systems received total distributions from the private equity partnerships in excess of \$507 million in fiscal year 2013.

Private Equity Investment Advisors					
		Combined Market Value*	% of Total		
Investment Advisor	Investment Style	As of June 30, 2013	Market Value		
Advent International GPE VII-B	Acquisition - Medium	\$ 10,428,569	0.0%		
BC European IX	Acquisition - Medium	11,840,857	0.0%		
Blackstone Capital Partners V and VI	Acquisition - Large	26,896,129	0.1%		
Canaan Partners IX	Venture Capital	4,363,045	0.0%		
Carlyle Europe Partners III	Acquisition - Medium	29,190,980	0.1%		
Carlyle Partners IV and V	Acquisition - Large	45,679,243	0.1%		
Centerbridge Capital Partners I and II	Acquisition & Debt	37,401,757	0.1%		
Centerbridge Capital Special Credit Partners II	Debt - Distressed	17,875,725	0.1%		
CVC European Equity Partners IV and V	Acquisition - Large	29,112,898	0.1%		
CVC European Equity Tandem Fund	Acquisition - Large	9,588,882	0.0%		
Encap VIII Co-Investors and IX	Acquisition - Energy	13,807,713	0.0%		
Exponent Partners II	Acquisition - Medium	19,957,300	0.1%		
First Reserve Fund XI and XII	Acquisition - Energy	52,629,609	0.29		
Genstar Capital Partners V	Acquisition - Medium	7,524,259	0.0%		
GTCR Fund IX and X	Acquisition - Medium	57,450,665	0.29		
Hellman & Friedman Capital Partners VI and VII	Acquisition - Large	30,907,125	0.19		
Kelso Investment Associates VIII	Acquisition - Medium	25,158,706	0.19		
KKR 2006 Fund	Acquisition - Large	26,987,300	0.19		
KRG Fund IV	Acquisition - Medium	20,172,606	0.19		
Lexington Capital Partners VI-B and VII	Secondary Fund	165,392,093	0.59		
Madison Dearborn VI	Acquisition - Large	11,484,402	0.09		
Montagu III and IV	Acquisition - Medium	18,667,132	0.19		
Nordic VII and VIII	Acquisition - Medium	30,653,288	0.19		
New Enterprise Associates 13 and 14	Venture Capital	42,628,409	0.19		
Dak Investment Partners XIII	Venture Capital	15,591,464	0.19		
	venture Capitai	17,771,404	0.17		
OCM Principal Opportunities Fund IV, VII, VIIb and IX	Debt - Distressed	37,833,703	0.19		
Odyssey Investment Partners IV	Acquisition - Medium	31,566,091	0.19		
Onex Partners II and III	Acquisition - Medium	42,415,252	0.19		
Pantheon Global Secondary Fund III and IV	Secondary Fund	125,395,889	0.40		
•	Fund-of-Funds				
Pathway Capital Management		976,432,568	2.99		
Paul Capital Partners IX	Secondary Fund	44,781,516	0.19		
Permira IV	Acquisition - Large	19,505,019			
Providence Equity Partners VI	Acquisition - Medium	29,758,164	0.19		
Quad-C Partners VIII	Acquisition - Medium	4,179,960	0.00		
Quantum Energy Partners V	Acquisition - Energy	9,775,047	0.00		
The Resolute Fund II	Acquisition - Medium	26,176,590	0.19		
ilver Lake Partners III	Acquisition - Technology	18,382,623	0.19		
Spectrum Equity Investors VI	Acquisition - Medium	6,857,389	0.00		
TA XI	Acquisition - Large	13,913,838	0.00		
TCV VI and VII	Venture Capital	42,839,357	0.19		
Thoma Cressey Fund VIII	Acquisition - Medium	20,595,522	0.19		
ΓPG Partners V and VI	Acquisition - Large	40,378,653	0.19		
Wayzata Opportunities Fund I, II and III	Debt - Distressed	44,912,757	0.19		
Wind Point Partners VI and VII	Acquisition - Medium	37,449,661	0.19		
Cash and cash equivalents	Cash and cash equivalents	2,377,464	0.09		
Stock distribution account	Public Stocks	219,764	0.09		
Total		\$ 2,337,136,983	7.00		

<sup>\*</sup>Market values are reported by the Systems' Private Equity advisors. Market values reflect the most current net asset values. In instances where the most current net asset values were not as of June 30, 2013, the net asset values utilized were cash flow adjusted through June 30, 2013.

# PRIVATE CREDIT PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Private Credit assets had a market value of approximately \$389 million, representing 1.2% of total assets.

### **Investment Program Description**

Investments in Private Credit are similar to Private Equity investments in that they are typically very longterm in nature, not publicly traded, relatively illiquid, and offer the potential for substantially higher returns (along with a commensurate level of risk). The Private Credit portfolio also differs from the Private Equity portfolio, and is a separate and distinct composite within Private Risk Assets. The Private Credit asset class is comprised primarily of debt-related investments that provide a current yield along with equity participation (usually warrants) referred to as an equity kicker. Primary strategies are distressed debt, bankruptcy restructurings, mezzanine debt, bank loans and other credit-driven or debt-related investment strategies. Investments can be made in the U.S. or foreign countries. In total, the allocation to Non-U.S. Private Credit investments will not exceed 40% of the overall Private Credit target allocation. The risks associated with Private Credit will be viewed both in isolation and within the context of the entire fund.

#### Structure

As of June 30, 2013, the combined PSRS/PEERS Private Credit assets committed\* for investment were \$727.6 million. The market value of funds that have been drawn down and actually invested as of June 30, 2013 was approximately \$389 million, representing 1.2% of total assets. PSRS/PEERS' private credit investment commitments that have not yet been funded were approximately \$133.9 million as of June 30, 2013.

The objective for the Systems' allocation to private credit is to achieve returns that are higher than those attainable in the public markets with the added benefit of diversification. In December 2009, the PSRS/PEERS Board of Trustees approved 2.0% for the target allocation to the private credit asset class. The long-term and illiquid nature of the private equity asset class dictates that capital must be invested at a measured pace. Pathway Capital Management has been retained by the Systems to

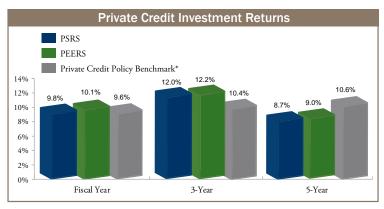
provide private credit investment management services through two structures; a discretionary fund-of-funds relationship and an advisory relationship. During the current year, Albourne America, LLC was retained to provide private credit advisory services.

#### **Market Overview**

Private Credit markets were driven by robust debt markets and low default rates. The Systems' Private Credit partnerships took advantage of the attractive markets to realize investments and return cash to investors.

#### **Performance**

The total returns for the PSRS and PEERS Private Credit programs were 9.8% and 10.1%, respectively, compared to the benchmark return of 9.6% for the fiscal year ended June 30, 2013. For the three-year time period, PSRS and PEERS outperformed the benchmark by 160 basis points and 180 basis points, respectively. For the five-year time period, PSRS and PEERS underperformed the benchmark by 190 basis points and 160 basis points, respectively. As discussed previously, private assets are more appropriately evaluated over longer timeframes.



Private Credit Statistical Performance					
Portfolio Characteristics	Fiscal Year	3-Year	5-Year		
Annualized PSRS Return	9.8%	12.0%	8.7%		
Annualized PEERS Return	10.1%	12.2%	9.0%		
Annualized Policy Benchmark Return*	9.6%	10.4%	10.6%		
Excess Return†	0.2%	1.6%	-1.9%		

<sup>\*</sup>The Private Credit policy benchmark is the Merrill Lynch High Yield Master II Index. †PSRS excess return relative to the Private Credit policy benchmark

<sup>\*</sup> Committed capital reflects the total amount of capital that the Systems are legally obligated to supply to the partnerships and funds as the capital is needed to invest in underlying holdings. Market value reflects capital that has actually been drawn and invested by the partnerships and funds.

The Private Credit program was established in December 2007, so 10-year returns are not available.

#### **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had committed to 11 separate partnerships with nine firms within the Private Credit asset class. No new commitments were made to the Private Credit asset class during fiscal year 2013. Additionally, the Systems received total distributions from the private credit partnerships in excess of \$146 million in fiscal year 2013.

Private Credit Investment Advisors				
Investment Advisor	Investment Style	Combined Market Value* As of June 30, 2013	% of Total Market Value	
Avenue Capital Group Fund V	Debt - Distressed	\$ 2,937,797	0.0%	
Caltius IV	Debt - Mezzanine	3,528,060	0.0%	
Centerbridge Special Capital Partners	Debt - Distressed	26,834,689	0.1%	
Encap Fund VII	Acquisition - Energy	10,145,020	0.0%	
Encap Fund VIII	Acquisition - Energy	20,347,342	0.1%	
Indigo Capital V	Debt - Mezzanine	15,369,763	0.0%	
Lone Star Real Estate Fund II	Debt - Distressed	24,053,162	0.1%	
OCM Opportunities Fund VIII	Debt - Distressed	30,048,486	0.1%	
OCM Opportunities Fund VIII b	Debt - Distressed	29,693,974	0.1%	
Pathway Capital Management	Funds-of-Funds	199,709,862	0.6%	
TA Subordianted Debt Fund III	Debt - Mezzanine	26,224,777	0.1%	
Total		\$ 388,892,932	1.2%	

<sup>\*</sup>Market values are reported by the Systems' Private Credit advisors. Market values reflect the most current net asset values. In instances where the most current net asset values were not as of June 30, 2013, the net asset values utilized were cash flow adjusted through June 30, 2013.

# PRIVATE REAL ESTATE PROGRAM SUMMARY

As of June 30, 2013, the combined PSRS/PEERS Private Real Estate assets had a market value of approximately \$2.6 billion, representing 7.7% of total assets.

# **Investment Program Description**

The Real Estate allocation is intended to provide exposure to a diversified portfolio of institutional quality private real estate investments that will provide meaningful, consistent returns, and act as a hedge against inflation and as a diversifier to the overall PSRS and PEERS investment portfolio. The specific objectives of the real estate allocation will be to optimize yield and return, preserve capital and enhance portfolio value across market cycles. The risks associated with Private Real Estate will be viewed both in isolation and within the context of the entire fund.

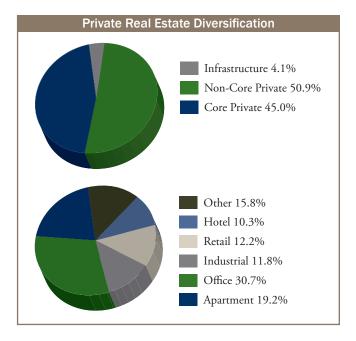
#### **Structure**

As of June 30, 2013, the combined PSRS/PEERS real estate assets committed\* for investment were \$3.1 billion. The market value of funds that had been drawn down and actually invested as of June 30, 2013 was approximately \$2.6 billion, representing 7.7% of total assets. PSRS/PEERS' real estate investment commitments that have not yet been funded were approximately \$455 million as of June 30, 2013.

Within the overall real estate allocation, the Systems have established a 55% target allocation to noncore real estate and a 45% allocation to core private real estate. Non-core investments represent those properties and/or investment strategies that require specialized acquisition and management expertise or skill to mitigate the business and leasing risk that may be associated with individual investments. Non-core investments have greater associated volatility compared to core investments. Core investments include existing, substantially leased income-producing properties located mainly in metropolitan areas that exhibit reasonable economic diversification and growth.

The following pie charts indicate the current allocation to real estate investment strategies utilizing the market value of the Systems' invested real estate assets and the diversification within the real estate composite by property type.

\* Committed capital reflects the total amount of capital that the Systems are legally obligated to supply to the partnerships and funds as the capital is needed to invest in underlying holdings. Market value reflects capital that has actually been drawn and invested by the partnerships and funds.



### **Market Overview**

Real estate values declined significantly in the United States in 2008 and 2009 as a result of the global financial crisis. Since that time, real estate markets have improved, suggesting a market recovery is underway. As such, the private real estate benchmark, the NCREIF Property Index (NPI), increased 10.7% in fiscal year 2013.

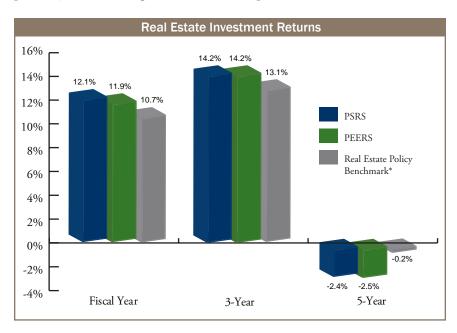
Real estate fundamentals are improving across the board as moderate economic growth supports demand for commercial space. Occupancy rates are increasing in all property types, while development activity remains near historical lows in all sectors except apartments. As a result, income growth is beginning to accelerate in the office, industrial and retail sectors which are in the early stages of recovery.

PSRS and PEERS maintain a sizable allocation to high-quality, stabilized real estate assets (core) held in primary markets due to the secure income return. Additionally, the Systems have an allocation to non-core assets to participate in the distressed sector of the real estate market. PSRS and PEERS will continue to focus real estate efforts going forward on investments that compliment the Systems' existing portfolio.

#### **Performance**

The total returns for the PSRS and PEERS Private Real Estate program were 12.1% and 11.9%, respectively, compared to the benchmark return of 10.7% for the fiscal year ended June 30, 2013. As shown in the table and graph below, the PSRS and PEERS annualized Private Real Estate returns outperformed the policy benchmark by 140 basis points and 120 basis points, respectively.

Both PSRS and PEERS significantly outperformed the policy benchmark for the three-year time period noted below. For the five-year time period, both PSRS and PEERS underperformed the benchmark. This underperformance was primarily due to the significant downward pressure on real estate valuations during the credit crisis of 2008 and 2009.



Real Estate Statistical Performance				
Portfolio Characteristics	Fiscal Year	3-Year	5-Year	
Annualized PSRS Return	12.1%	14.2%	-2.4%	
Annualized PEERS Return	11.9%	14.2%	-2.5%	
Annualized Policy Benchmark Return*	10.7%	13.1%	-0.2%	
Excess Return†	1.4%	1.1%	-2.2%	

<sup>\*</sup>The Real Estate policy benchmark is the NCREIF Property Index.

†PSRS excess return relative to the Real Estate policy benchmark

The Real Estate program was established in April 2004, so a 10-year return is not available.

# **Investment Advisors**

As of June 30, 2013, PSRS and PEERS had committed to 49 separate partnerships with 27 firms within the Private Real Estate asset class. In fiscal year 2013, PSRS and PEERS committed to three new partnerships totaling \$200 million. Additionally, the Systems received total distributions from the real estate partnerships in excess of \$312 million in fiscal year 2013.

		Combined Market Value*	% of Total
Investment Advisor	Investment Style	As of June 30, 2013	Market Value
Alinda Infrastructure Fund I	Infrastructure	\$ 48,008,047	0.1%
AMB Alliance III	Non-Core - Private	48,941,390	0.1%
AMB Japan Fund I	Non-Core - Private	28,851,794	0.1%
AEW Core Property Fund	Core - Private	79,219,192	0.2%
Blackstone R.E. Partners V, VI and VII	Non-Core - Private	195,270,625	0.6%
Brockton Capital II	Non-Core - Private	16,533,971	0.0%
Carlyle Europe Real Estate Partners III	Non-Core - Private	53,138,304	0.2%
Carlyle Realty V and VI	Non-Core - Private	73,427,729	0.2%
CBRE Fund IV, US Value 5, and US Value 6	Non-Core - Private	69,015,732	0.2%
CIM Fund III	Non-Core - Private	66,320,493	0.2%
CIM Urban REIT	Non-Core - Private	39,349,579	0.1%
Colony Investors VIII	Non-Core - Private	23,465,108	0.1%
CPI Capital Partners Europe	Non-Core - Private	14,930,422	0.0%
Dune Real Estate Fund I	Non-Core - Private	19,898,293	0.1%
Forum Asian Realty Income II	Non-Core - Private	31,579,974	0.1%
Guggenheim Structured R.E. III	Non-Core - Private	13,098,385	0.0%
Heitman Value Partners I and II	Non-Core - Private	51,851,472	0.2%
JPMorgan Special Situation Property Fund	Non-Core - Private	85,238,674	0.3%
JPMorgan Strategic Property Fund	Core - Private	262,836,041	0.8%
LaSalle Asia Opportunity Fund II and III	Non-Core - Private	37,307,617	0.1%
LaSalle Income & Growth IV and V	Non-Core - Private	60,645,178	0.2%
LaSalle Japan Logistics Fund II	Non-Core - Private	16,730,733	0.1%
LaSalle Property Fund	Core - Private	84,393,326	0.3%
Lone Star V and VI	Non-Core - Private	47,744,638	0.1%
Lone Star Real Estate Fund	Non-Core - Private	7,589,946	0.0%
Macquarie Infrastructure Partners	Infrastructure	56,758,379	0.2%
MSREF V International	Non-Core - Private	4,987,371	0.0%
Morgan Stanley Prime Property Fund	Core - Private	286,255,584	0.9%
NREP Real Estate Debet Fund	Non-Core - Private	4,436,495	0.0%
Noble Hospitality Fund	Non-Core - Private	66,381,817	0.2%
Principal Enhanced Property Fund	Core - Private	36,335,365	0.1%
Prudential PRISA Fund	Core - Private	137,131,845	0.4%
Prudential PRISA II and III	Non-Core - Private	75,502,740	0.2%
RREEF America REIT III	Non-Core - Private	29,526,965	0.1%
Starwood Hospitality Fund	Non-Core - Private	23,412,731	0.1%
UBS Trumbull Property Fund	Core - Private	275,458,886	0.8%
Westbrook R.E. Fund VII, VIII, and IX	Non-Core - Private	102,835,834	0.3%
Cash and cash equivalents	Cash and cash equivalents		0.0%
Total		\$ 2,578,543,518	7.7%

<sup>\*</sup>Market values are reported by the Systems' Real Estate advisors. Market values reflect the most current net asset values. In instances where the most current net asset values were not as of June 30, 2013, the net asset values utilized were cash flow adjusted through June 30, 2013.

U.S. Public Equity Broker Commissions Report				
PSRS				
Brokerage Firm	Shares Traded	<b>Dollars Traded</b>	Commissions Paid	Cost Per Share
Pershing LLC	23,294,018	\$ 697,978,404	\$ 432,781	\$ 0.02
Credit Suisse Securities, LLC	12,244,997	532,110,355	423,645	0.03
Jefferies & Company, Inc.	11,356,375	711,151,945	369,068	0.03
Capital Institutional Services	8,642,532	254,867,754	312,333	0.04
Instinet, LLC	12,961,285	294,670,981	272,906	0.02
Merrill Lynch	23,820,952	719,400,527	261,689	0.01
Deutsche Bank	36,185,411	1,005,838,109	259,168	0.01
Morgan Stanley & Co Incorporated	18,924,163	609,860,270	241,983	0.01
JP Morgan Chase	17,512,623	517,829,764	199,519	0.01
Weeden & Co	20,063,677	627,509,393	187,487	0.01
Liquidnet Inc.	17,935,432	525,507,462	186,374	0.01
Goldman Sachs and Company	8,789,118	329,937,518	182,859	0.02
Investment Technology Group	18,303,268	554,080,063	182,013	0.01
Barclays Capital, Inc.	13,384,041	505,223,601	171,220	0.01
Citigroup Global Markets, Inc.	9,980,457	420,145,326	161,905	0.02
UBS Securities, LLC	5,593,759	184,935,660	158,319	0.03
SG Cowen & Co	16,660,624	552,068,612	134,776	0.01
Bank of New York	5,170,982	265,992,279	129,267	0.02
Other (<\$120,000)	79,610,343	2,442,813,802	1,825,500	0.02
Total	360,434,057	\$11,751,921,825	\$ 6,092,812	\$ 0.02

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Brokerage Firm	Shares Traded	Dollars Traded	Commissions Paid	Cost Per Share
Pershing LLC	2,638,857	\$ 80,494,444	\$ 48,697	\$ 0.02
Credit Suisse Securities, LLC	1,500,733	60,872,586	47,575	0.03
Jefferies & Company, Inc.	1,250,497	78,195,921	40,093	0.03
Capital Institutional Services	890,336	26,921,969	32,093	0.04
Instinet, LLC	1,417,686	33,077,849	29,403	0.02
Merrill Lynch	2,530,994	75,305,457	28,780	0.01
Deutsche Bank	3,947,130	101,826,855	28,109	0.01
Morgan Stanley & Co Incorporated	1,753,803	58,692,903	24,435	0.01
JP Morgan Chase	1,856,580	53,586,828	23,333	0.01
Goldman Sachs and Company	999,786	36,921,148	21,077	0.02
Investment Technology Group	1,977,612	59,254,761	19,713	0.01
Weeden & Co	1,921,983	59,538,608	17,765	0.01
UBS Securities, LLC	612,736	20,401,919	17,132	0.03
Barclays Capital, Inc.	1,199,252	49,335,524	17,042	0.01
Liquidnet Inc.	1,548,836	45,874,057	16,788	0.01
Citigroup Global Markets, Inc.	1,012,307	42,994,115	16,733	0.02
Bank of New York	518,895	28,712,611	13,255	0.03
SG Cowen & Co	1,489,145	47,738,298	13,198	0.01
Other (<\$12,000)	8,858,333	253,926,607	188,390	0.02
Total	37,925,501	\$ 1,213,672,460	\$ 643,611	\$ 0.02

Global Public Equity Broker Commissions Report					
PSRS					
Brokerage Firm	<b>Shares Traded</b>	<b>Dollars Traded</b>	Commissions Paid	Cost (Basis Points)	
Morgan Stanley & Co Incorporated	68,948,901	\$ 480,784,186	\$ 283,703	5.9	
Goldman Sachs and Company	39,297,285	269,230,439	263,801	9.8	
Merrill Lynch	67,815,760	319,145,559	210,516	6.6	
UBS Securities, LLC	43,099,463	282,877,963	207,162	7.3	
Instinet, LLC	54,792,511	406,752,709	197,653	4.9	
Credit Suisse Securities, LLC	23,538,854	137,120,811	128,770	9.4	
Deutsche Bank	35,878,583	204,169,823	128,291	6.3	
JP Morgan Chase	17,234,921	91,313,423	109,966	12.0	
Citigroup Global Markets, Inc.	18,075,258	100,460,745	105,612	10.5	
Other (<\$100,000)	135,007,083	880,659,157	641,969	7.3	
Total	503,688,619	\$3,172,514,815	\$ 2,277,443	7.2	
PEERS					
Brokerage Firm	Shares Traded	Dollars Traded	Commissions Paid	Cost (Basis Points)	
				<u> </u>	
Morgan Stanley & Co Incorporated	6,515,147	\$ 49,812,072	\$ 30,357	6.1	
Goldman Sachs and Company	4,734,123	31,058,805	29,875	9.6	
UBS Securities, LLC	4,901,404	35,075,519	25,400	7.2	
Merrill Lynch	8,605,549	36,533,644	23,807	6.5	
Instinet, LLC	7,353,706	45,882,414	22,214	4.8	
Deutsche Bank	4,193,008	23,621,353	14,737	6.2	
Credit Suisse Securities, LLC	2,828,204	15,315,826	14,409	9.4	
Citigroup Global Markets, Inc.	2,166,411	11,533,659	11,549	10.0	
JP Morgan Chase	1,741,094	9,141,804	11,264	12.3	
Other (<\$10,000)	13,853,397	90,549,762	67,791	7.5	
<u>Total</u>	56,892,043	\$ 348,524,858	\$ 251,403	7.2	

	Investment Summ	ary as of June 30, 2	013		
				Percent	
	PSRS	PEERS	Combined	Fair \	
Asset Type	Fair Value	Fair Value	Funds	FY 2013	FY 2012
Public Risk Assets					
U.S. Public Equity	\$ 9,865,044,978	\$ 1,074,100,330	\$10,939,145,308	32.7%	30.5%
Global Public Equity	4,594,292,140	519,668,961	5,113,961,101	15.3%	14.8%
Public Credit	2,481,378,318	276,101,472	2,757,479,790	8.2%	9.0%
Hedged Assets	4,274,185,297	455,816,530	4,730,001,827	14.1%	14.6%
Total Public Risk Assets	21,214,900,733	2,325,687,293	23,540,588,026	70.3%	68.9%
Safe Assets					
U.S. Treasuries	3,508,945,498	433,086,910	3,942,032,408	11.8%	13.6%
U.S. TIPS	456,694,692	51,415,872	508,110,564	1.5%	1.7%
Total Safe Assets	3,965,640,190	484,502,782	4,450,142,972	13.3%	15.3%
Private Risk Assets					
Private Real Estate	2,327,938,285	250,605,233	2,578,543,518	7.7%	7.4%
Private Equity	2,154,895,419	182,241,564	2,337,136,983	7.0%	6.9%
Private Credit	359,475,497	29,417,435	388,892,932	1.2%	1.4%
Total Private Risk Assets	4,842,309,201	462,264,232	5,304,573,433	15.9%	15.7%
Securities Lending Collateral	9,764	1,102	10,866	0.0%	-0.1%
Cash & Equivalents*	153,944,707	25,380,761	179,325,468	0.5%	0.2%
Total Investments**	\$ 30,176,804,595	\$3,297,836,170	\$33,474,640,765	100.0%	100.0%
Reconciliation with Financial States	nonts				
Total from above	\$ 30,176,804,595	\$ 3,297,836,170	\$ 33,474,640,765		
Accrued payable for investments	Ψ 30,17 0,00 1,377	Ψ 5,277,050,170	ψ 55,17 1,010,705		
purchased	4,329,286,136	451,099,920	4,780,386,056		
Accrued income payable	49,867	5,525	55,392		
Accrued receivable for	->,,	2,2-2	,,,,,,		
investments sold	(1,014,191,683)	(87,558,789)	(1,101,750,472)		
Accrued income receivable	(61,298,852)	(6,935,393)	(68,234,245)		
Securities lending collateral	(9,764)	(1,102)	(10,866)		
Short-term investments designated	, - ,	, - /	, . ,		
for benefits	(153,913,655)	(25,382,804)	(179,296,459)		
Statements of Plan Net Position	\$ 33,276,726,644	\$3,629,063,527	\$36,905,790,171		

<sup>\*</sup>Managers may hold cash or cash equivalents as part of an active management strategy. Cash or cash equivalents held as part of an active management strategy are not separately listed.

<sup>\*\*</sup> Total Investments includes accrued income and securities lending collateral as of June 30, 2013.

Investment Exp	penses for the Fiscal Year En	ided June 30, 2013	
Investment Managers	PSRS	PEERS	Total
Investment Management Fees			
NISA Investment Advisors - Core	\$ 2,671,182	\$ 320,398	\$ 2,991,580
NISA Investment Advisors - TIPS	365,900	41,193	407,093
Safe Assets Fees	3,037,082	361,591	3,398,673
NISA Investment Advisors - Corporate	923,373	100,306	1,023,679
Oaktree Bank Loans	1,420,930	147,488	1,568,418
Pacific Investment Management Company	4,858,124	553,509	5,411,633
Public Credit Fees	7,202,427	801,303	8,003,730
Analytic Investors, LLC	1,200,680	121,627	1,322,307
AQR Capital Management -140/40	1,353,209	125,825	1,479,034
Aronson & Johnson & Ortiz	1,730,491	151,696	1,882,187
BlackRock Investment Management	196,228	27,164	223,392
Martingale Asset Management	833,957	38,002	871,959
NISA Investment Advisors	100,040	12,163	112,203
Westwood Management	3,692,824	330,725	4,023,549
Zevenbergen Capital	684,205	69,172	753,377
U.S. Public Equity Fees	9,791,634	876,374	10,668,008
Acadian Asset Management	446,079	50,367	496,446
Alliance Bernstein Institutional Management	986,449	116,389	1,102,838
Analytic Investors, LLC - Global Low Vol	881,036	102,260	983,296
AQR Capital Management	1,304,868	148,859	1,453,727
Arrowstreet Capital	3,639,320	404,469	4,043,789
BlackRock - ACWI EX US	326,744	32,321	359,065
Esemplia	266,238	27,785	294,023
INVESCO Global Asset Management	324,312	39,104	363,416
MFS Institutional Advisors	2,264,332	234,772	2,499,104
Neon Capital Management	2,679,720	297,746	2,977,466
NISA Investment Advisors	104,778	15,405	120,183
Russell Investments	83,971	8,511	92,482
The Rock Creek Group	2,436,247	246,857	2,683,104
T. Rowe Price International, Inc.	499,725	60,250	559,975
Global Public Equity Fees	16,243,819	1,785,095	18,028,914
Allianz	902,746	88,281	991,027
AQR Capital Management	728,918	83,242	812,160
Chartwell Investment Partners	601,698	64,789	666,487
Columbus Circle	942,135	93,197	1,035,332
NISA Investment Advisors	115,051	11,868	126,919
Next Century Growth Investors	584,447	55,708	640,155
RBC Global Asset Management	580,636	64,624	645,260
Thomson, Horstmann & Bryant	254,398	28,840	283,238
S-Cap Fees	4,710,029	490,549	5,200,578
Alpha Overlay Fees	44,972,228	4,574,569	49,546,797
•	102,688,586	10,759,920	113,448,506
Hedged Assets Fees Private Real Estate Fees			
	39,440,902	4,184,428	43,625,330
Private Credit Fees	17,555,054	1,498,631	19,053,685
Private Equity Fees	83,505,561	13,267,302	96,772,863
Commission Recapture Income	(191,494)	(17,026)	(208,520)
Investment Management Expense	328,955,828	38,582,736	367,538,564
Custodial Services			
JP Morgan Chase, NA	417,637	41,305	458,942
Custodial Fees	417,637	41,305	458,942
Investment Consultants			
Albourne America, LLC	560,516	55,613	616,129
Pathway Consulting	1,840,276	165,475	2,005,751
Risk Metrics - ISS	30,713	3,038	33,751
R.V. Kuhns and Associates, Inc.	7,203	960	8,163
Towers Watson	341,250	33,750	375,000
Townsend	318,500	31,499	349,999
Investment Consultant Fees	3,098,458	290,335	3,388,793
Staff Investment Expenses	3,657,042	2,104,767	5,761,809
Total Investment Expenses	\$336,128,965	\$ 41,019,143	\$ 377,148,108



# **ACTUARIAL SECTION**

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# **CERTIFICATION OF ACTUARIAL RESULTS**



November 5, 2013

Board of Trustees Public School Retirement System of Missouri Public Education Employee Retirement System of Missouri 3210 West Truman Boulevard Jefferson City, MO 65109

#### Re: Certification of Actuarial Results

Dear Members of the Board:

At your request, we have performed actuarial valuations of the Public School Retirement System and the Public Education Employee Retirement System of Missouri as of June 30, 2013. An actuarial valuation of each System is performed annually.

The actuarial valuation is based upon:

- a. Data Relative to the Members of the Systems Data for all members of each System was provided by the staff. Such data is tested for reasonableness by the actuary but is used unaudited.
- b. *Assets of the Fund* The values of the trust fund assets for each System are provided by the staff. An actuarial value of assets, with gains and losses recognized over five years, is used to develop actuarial results.
- c. Actuarial Cost Method The actuarial cost method utilized by each System is the Entry Age Normal Cost Method. The objective of this method is to finance the benefits of the Systems as a level percentage of pay over the entire career of each member. Any Unfunded Actuarial Accrued Liability ("UAAL") under this method is separately financed as a level percentage of payroll over a fixed 30-year period, where a new 30-year gain or loss amortization base is established each year.
- d. *Actuarial Assumptions* An experience study was completed for each System as of June 30, 2011. Based on those studies, the Board adopted several assumption changes effective for the actuarial valuations as of June 30, 2011. Minor updates were made for the June 30, 2012 valuations. For the June 30 2013 valuations, the retirement rates were updated to reflect the permanent extension of the Special Early Retirement ("25-and-Out") benefit in PSRS and PEERS and for the one year extension of the enhanced Normal Retirement ("2.55% formula factor") benefit in PSRS.

The actuarial assumptions and methods used in this valuation were selected and approved by the Board and are in accordance with paragraph 36 of GASB Statement Number 25. In general, the methods provide orderly funding of all benefits being accrued, as well as any Unfunded Actuarial Accrued Liability, over a period of 30 years. The smoothing method employed in determining the Actuarial Value of Assets may accelerate or lengthen the effective funding period, depending on whether gains or losses are experienced. In our opinion, the actuarial assumptions and methods are reasonable for purposes of the actuarial valuation.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by the staff with our guidance.

PricewaterhouseCoopers LLP, One North Wacker Drive Chicago, IL,60606 T: (312)298 2000, F: (312) 298 2001, www.pwc.com/us

# **CERTIFICATION OF ACTUARIAL RESULTS (continued)**



In order to establish long-term, consistent methods in the funding of the System, the Board of Trustees has adopted a funding policy. The funding of the System shall be carried out in such a way that the burden of paying retirement costs shall be shared equitably by present and succeeding generations of members and taxpayers. To this end, the following principles shall apply:

- The Board of Trustees shall adopt actuarial assumptions, each of which individually represents a reasonable long-term estimate of anticipated experience under the System, derived from experience studies conducted every fifth year.
- 2. The actuarial funding method used shall be the Entry Age Normal Method with normal costs allocated as a percentage of payroll.
- 3. It shall be the general objective to maintain a fixed amortization period of 30 years or less in the funding of the Unfunded Actuarial Accrued Liability. Effective with the 2007 Legislative session, any increase in the Unfunded Actuarial Accrued Liability due to such changes in benefit structure shall be amortized over a fixed 20-year period.
- 4. Where an escalation in future payroll is assumed in determining the amortization payments toward the Unfunded Actuarial Accrued Liability, then the annual rate of such escalation shall not exceed the expected rate of expansion in total System payroll based upon the actuarial assumptions.
- 5. Assets used in the actuarial valuation shall be valued by smoothing investment gains and losses over a period of five years.
- 6. Annual actuarial valuations shall be made of the System's assets and liabilities. The contribution rate shall be established based on the results of these valuations.

It is the Board's intent to maintain the current contribution rates until the unfunded actuarial accrued liability of each System is fully amortized, to the extent the current contribution rates are sufficient to do so.

The results of the valuations are based on the membership and asset data provided by the System staff, the provisions of each System at the valuation date, the actuarial assumptions and methods described herein, and reflect the Board's funding policy stated above. Based on these items, we certify these results to be true and correct.

Sincerely,

Sheldon Gamzon, FSA, EA, MAAA

Alellar A. Lang

Principal

Brandon Robertson, ASA, EA, MAAA

Branden J. Roberton

Director

Calculation	of Unfunded Actuarial Accrued Liability	
Public School Retirement System of Missouri As of June 30, 2013	i	
(1) Present value of future benefits for:	Active members State members Service retirees Disability retirees Tax-sheltered annuitants Beneficiaries and survivors Death benefits Inactive members	Amount \$ 21,812,311,433 9,918,319 21,232,956,326 204,788,381 466,586 812,410,947 78,172,649 556,346,418
<ul><li>(2) Present value of future normal costs</li><li>(3) Actuarial accrued liability ((1)-(2))</li></ul>	Total	44,707,371,059 <u>7,949,205,648</u> 36,758,165,411
<ul><li>(4) Actuarial value of assets</li><li>(5) Unfunded actuarial accrued liability ((3)-(4)</li></ul>	i))	

Calculation	on of Unfunded Actuarial Accrued Liability	
Public Education Employee Retirement Sys As of June 30, 2013	etem of Missouri	
(1) Present value of future benefits for:		Amount
	Active members	\$ 3,412,169,048
	Service retirees	1,555,019,559
	Disability retirees	33,221,037
	Beneficiaries and survivors	65,372,691
	Inactive members	139,940,027
	Total	5,205,722,362
(2) Present value of future normal costs		1,238,103,610
(3) Actuarial accrued liability ((1)-(2))		3,967,618,752
(4) Actuarial value of assets		3,237,199,555
(5) Unfunded actuarial accrued liability ((3)-	(4))	\$ \$730,419,197

Required Contribution Rate & Amortization of Unfunded Liability	
Public School Retirement System of Missouri	
For the fiscal year ending June 30, 2015	
	Percentage of Payroll
(1) Total contribution rate, member plus employer	29.00%
(2) Normal cost rate	19.05%
(2) Normal Cost rate	17.07/0
(3) Approximate rate available for unfunded actuarial accrued liability ((1) - (2))	9.95%
(4) Rate needed to fund UAAL	10.16%
(1) Take needed to fund C121E	10.1070
(5) Benchmark contribution rate - normal cost plus a rate to fund the UAAL*	29.21%
(6) Recommended rate for FY 2015	29.00%

<sup>\*</sup>Since the effective UAAL amortization period for the current contribution rate (29.4 years at 29%) is within three years of the effective amortization period of the benchmark contribution rate (28.2 years at 29.21%), the actuaries recommended no change in the contribution rate for FY 2015.

Required Contribution Rate & Amortization of Unfunded Liability	
Public Education Employee Retirement System of Missouri For the fiscal year ending June 30, 2015	
	Percentage of Payroll
(1) Total contribution rate, member plus employer	13.72%
(2) Normal cost rate	10.86%
(3) Approximate rate available for unfunded actuarial accrued liability ((1) - (2))	2.86%
(4) Rate needed to fund UAAL	3.00%
(5) Benchmark contribution rate - normal cost plus a rate to fund the UAAL**	13.86%
(6) Recommended rate for FY 2015	13.72%

<sup>\*\*</sup>Since the effective UAAL amortization period for the current contribution rate (31 years at 13.72%) is within three years of the effective amortization period of the benchmark contribution rate (28.3 years at 13.86%), the actuaries recommended no change in the contribution rate for FY 2015.

Analysis of Actuarial G	Gains and Losses	
Public School Retirement System of Missouri As of June 30, 2013		
(Dollar amounts in thousands)		
(1) Unfunded actuarial liability as of July 1, 2012		\$ 6,575,028
(2) Normal cost for 2013 plan year (mid-year)		833,146
(3) Contribution expected to be received during year		(1,142,936)
(4) Interest to year end @ 8.00% on (1), (2) and (3)		513,611
(5) Expected unfunded actuarial liability as of June 30, 2013		6,778,849
(6) Contribution shortfall		(125,146)
<ul><li>(7) Actuarial (gain)/loss during the year</li><li>a. From investment</li><li>b. From actuarial liabilities</li><li>c. From legislative changes</li></ul>	\$ 1,038,192 (314,856) (62,020)	
d. Total		661,316
(8) Actual unfunded actuarial liability as of June 30, 2013		\$ 7,315,019

Analysis of Actuarial G	ains and Losses	
Public Education Employee Retirement System of Missouri As of June 30, 2013 (Dollar amounts in thousands)		
(1) Unfunded actuarial liability as of July 1, 2012		\$ 655,467
(2) Normal cost for 2013 plan year (mid-year)		155,067
(3) Contribution expected to be received during year		(186,990)
(4) Interest to year end @ 8.00% on (1), (2) and (3)		51,160
(5) Expected unfunded actuarial liability as of June 30, 2013		674,704
(6) Contribution shortfall		(7,129)
<ul> <li>(7) Actuarial (gain)/loss during the year</li> <li>a. From investment</li> <li>b. From actuarial liabilities</li> <li>c. From legislative changes</li> <li>d. Total</li> </ul>	\$ 99,107 (38,020) 1,757	62,844
(8) Actual unfunded actuarial liability as of June 30, 2013		\$ 730,419

Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000's)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/2004	73,797	\$ 3,408,230	\$ 46,184	1.8 %	42.5	11.4
6/30/2005	73,850	3,540,649	47,944	3.8	42.5	11.4
6/30/2006	75,540	3,775,752	49,983	4.3	42.4	11.2
6/30/2007	77,121	3,980,698	51,616	3.3	42.3	11.1
6/30/2008	78,436	4,209,417	53,667	4.0	42.2	11.1
6/30/2009	79,335	4,439,381	55,957	4.3	42.2	11.1
6/30/2010	79,256	4,493,865	56,701	1.3	42.3	11.3
6/30/2011	77,708	4,338,976	55,837	-1.5	42.3	11.5
6/30/2012	77,529	4,379,060	56,483	1.2	42.2	11.4
6/30/2013	78,076	4,460,872	57,135	1.2	42.1	11.4

	So	hedule of PEERS Ac	tive Member Val	uation Data		
Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000's)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/2004	45,880	\$ 984,866	\$ 21,466	3.6 %	46.2	7.0
6/30/2005	46,598	1,055,204	22,645	5.5	46.6	7.1
6/30/2006	48,188	1,190,994	24,716	9.1	46.4	7.1
6/30/2007	49,281	1,275,199	25,876	4.7	46.6	7.2
6/30/2008	50,865	1,377,506	27,082	4.7	46.8	7.3
6/30/2009	51,234	1,417,485	27,667	2.2	47.1	7.7
6/30/2010	50,363	1,433,691	28,467	2.9	47.5	8.0
6/30/2011	48,800	1,414,442	28,984	1.8	47.9	8.3
6/30/2012	48,605	1,437,310	29,571	2.0	48.1	8.4
6/30/2013	48,709	1,470,830	30,196	2.1	48.1	8.5

# Solvency Test

# Public School Retirement System of Missouri

(Dollar amounts in thousands)

# Actuarial Accrued Liability for:

Actuarial Valuation Member Date Contributions	Current Retirees & Beneficiaries	Active & Inactive Members Employer Financed Portion	Net Assets Available for Benefits		centage of Actuar abilities Covered Net Assets for:		
	(1)	(2)	(3)		(1)	(2)	(3)
6/30/2004	\$ 4,954,080	\$12,625,925	\$ 8,645,254	\$ 21,501,572	100.00%	100.00%	45.40%
6/30/2005	5,119,055	13,976,901	8,785,557	23,049,441	100.00	100.00	45.00
6/30/2006	5,453,906	15,371,279	9,211,945	24,801,644	100.00	100.00	43.20
6/30/2007	5,787,667	17,059,613	9,549,443	27,049,004	100.00	100.00	44.00
6/30/2008	6,174,718	18,548,552	9,767,182	28,751,241	100.00	100.00	41.20
6/30/2009	6,299,067	19,745,129	10,015,925	28,826,075	100.00	100.00	27.80
6/30/2010	6,506,803	20,532,011	10,194,788	28,931,331	100.00	100.00	18.60
6/30/2011	6,571,916	20,023,701	7,787,813	29,387,486	100.00	100.00	35.80
6/30/2012	6,687,358	21,191,032	7,709,641	29,013,002	100.00	100.00	14.70
6/30/2013	6,856,920	22,328,795	7,572,451	29,443,147	100.00	100.00	3.40

# **Solvency Test**

# Public Education Employee Retirement System of Missouri

(Dollar amounts in thousands)

### Actuarial Accrued Liability for:

	Actu	ariai Accrued Liabili	ty for:				
Actuarial		Current	Active & Inactive Members Employer	Net Assets	Pei	centage of Actuar	ial
Valuation Date	Member Contributions	Retirees & Beneficiaries	Financed Portion	Available for Benefits		abilities Covered l Net Assets for:	
	(1)	(2)	(3)		(1)	(2)	(3)
6/30/2004	\$ 444,318	\$ 804,864	\$ 972,028	\$ 1,837,308	100.00%	100.00%	60.5 %
6/30/2005	466,259	904,292	1,043,943	2,011,566	100.00	100.00	61.4
6/30/2006	524,014	1,020,486	1,212,333	2,218,638	100.00	100.00	55.6
6/30/2007	580,853	1,093,650	1,308,310	2,481,562	100.00	100.00	61.7
6/30/2008	650,970	1,215,036	1,412,596	2,703,762	100.00	100.00	59.3
6/30/2009	693,962	1,305,025	1,459,057	2,792,182	100.00	100.00	54.4
6/30/2010	743,146	1,392,753	1,522,813	2,892,411	100.00	100.00	49.7
6/30/2011	783,112	1,398,620	1,367,616	3,028,757	100.00	100.00	61.9
6/30/2012	822,485	1,541,541	1,382,321	3,090,880	100.00	100.00	52.6
6/30/2013	862,035	1,653,613	1,451,971	3,237,200	100.00	100.00	49.7

	Adde	Added to Rolls		Removed from Rolls		End of Year		% Increase	
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowances	in Annual Allowance	in Average Annual Allowance
2012-2013									
Service Retirees	2,659	\$ 98,663,536	907	\$ 27,431,830	47,594	\$ 1,888,628,855	\$ 39,682	5.92 %	2.02 %
Disability Retirees	69	1,808,376	28	627,785	842	21,372,682	25,383	7.58	2.33
Beneficiaries	376	9,380,442	185	3,088,202	3,755	96,196,708	25,618	8.55	3.02
Note: 115 retirees and be	eneficiaries had	their benefit on hold	at June 30, 20	013 and are not incli	uded in the pays	ment rolls at the end of t	the year.		
2011-2012									
Service Retirees	2,946	\$ 108,593,761	822	\$ 25,293,380	45,842	\$ 1,783,144,601	\$ 38,898	6.92 %	1.97 %
Disability Retirees	70	1,628,482	30	618,063	801	19,867,641	24,804	7.17	1.82
Beneficiaries	310	11,791,505	181	3,489,331	3,564	88,623,659	24,866	7.27	3.39
Note: 137 retirees and be	eneficiaries had	their benefit on hold	at June 30, 20	012 and are not incli	ided in the pay	ment rolls at the end of i	the year.		
2010-2011									
Service Retirees	3,145	\$ 115,976,129	891	\$ 25,543,283	43,718	\$ 1,667,760,851	\$ 38,148	5.77 %	0.31 %
Disability Retirees	76	2,095,095	36	885,453	761	18,538,146	24,360	6.98	1.36
Beneficiaries	347	7,794,495	194	3,208,289	3,435	82,616,257	24,051	5.86	1.14
Note: 151 retirees and be	eneficiaries had	their benefit on hold	at June 30, 20	011 and are not incli	ided in the pay	ment rolls at the end of t	the year.		
2009-2010									
Service Retirees	2,392	\$ 84,290,821	825	\$ 23,896,894	41,464	\$ 1,576,834,116	\$ 38,029	4.02 %	0.09 %
Disability Retirees	54	1,337,647	29	646,445	721	17,328,504	24,034	4.18	0.57
Beneficiaries	290	7,127,771	161	2,596,246	3,282	78,045,764	23,780	6.18	2.00
2008-2009									
Service Retirees	2,629	\$ 98,725,164	777	\$ 21,507,072	39,897	\$ 1,515,913,812	\$ 37,996	10.30 %	5.18 %
Disability Retirees	37	924,132	32	621,480	696	16,632,852	23,898	5.89	5.13
Beneficiaries	287	7,160,304	136	2,206,056	3,153	73,504,884	23,313	10.68	5.38
2007-2008									
Service Retirees	2,596	\$ 91,611,816	808	\$ 21,214,344	38,045	\$ 1,374,367,260	\$ 36,125	8.08 %	3.01 %
Disability Retirees	45	1,122,528	37	855,696	691	15,707,856	22,732	3.95	2.74
Beneficiaries	289	6,258,996	175	2,635,176	3,002	66,412,560	22,123	8.06	3.96

PEERS Schedule of Retirees and Beneficiaries Added to and Removed from Retirement Rolls										
	Added to Rolls		Removed from Rolls		Rolls End of Year				% Increase	
	Number	Annual Allowances	Number	Annual Allowances	Number		Annual Allowances	Average Annual Allowances	in Annual Allowance	in Average Annual Allowance
2012-2013										
Service Retirees	1,674	\$ 16,712,855	694	\$ 4,168,985	21,434	\$	164,297,318	\$ 7,665	8.23 %	3.27 %
Disability Retirees	69	408,169	29	158,081	705		3,493,840	4,956	9.21	3.01
Beneficiaries	164	1,155,936	77	357,536	1,443		7,451,611	5,164	13.14	6.32
Note: 92 retirees and bene	ficiaries had t	heir benefit on hold a	t June 30, 20	13 and are not inclu	ded in the payn	nent r	olls at the end of t	he year.		
2011-2012										
Service Retirees	1,747	\$ 17,066,211	647	\$ 3,356,576	20,454	\$	151,802,237	\$ 7,422	10.26%	4.33 %
Disability Retirees	69	405,024	21	86,830	665		3,199,134	4,811	12.69	4.56
Beneficiaries	151	800,248	58	254,077	1,356		6,586,250	4,857	10.13	2.58
Note: 87 retirees and benej	ficiaries had th	eir benefit on hold at	June 30, 201	12 and are not includ	led in the paym	ent ro	olls at the end of th	ne year.		
2010-2011										
Service Retirees	1,675	\$ 16,740,804	595	\$ 2,955,819	19,354	\$	137,682,745	\$ 7,114	9.86%	3.73 %
Disability Retirees	73	411,908	31	165,052	617		2,838,986	4,601	9.53	2.06
Beneficiaries	114	672,098	73	276,872	1,263		5,980,471	4,735	7.08	3.61
Note: 94 retirees and benej	ficiaries had th	eir benefit on hold at	June 30, 201	! I and are not includ	led in the paym	ent ro	olls at the end of th	ne year.		
2009-2010		,						•		
Service Retirees	1,426	\$ 12,130,367	613	\$ 3,074,132	18,274	\$	125,327,880	\$ 6,858	6.14%	1.42 %
Disability Retirees	51	250,591	16	62,887	575		2,592,012	4,508	7.81	1.26
Beneficiaries	139	832,603	67	315,936	1,222		5,585,100	4,570	9.82	3.32
2008-2009										
Service Retirees	1,325	\$ 12,276,828	560	\$ 2,464,452	17,461	\$	118,079,604	\$ 6,762	11.55 %	6.66 %
Disability Retirees	44	233,556	18	92,412	540	Ψ	2,404,284	4,452	10.46	5.12
Beneficiaries	112	556,872	40	176,184	1,150		5,085,876	4,423	10.89	3.95
2007-2008										
Service Retirees	1,256	\$ 11,273,184	569	\$ 2,322,624	16,696	\$	105,856,860	\$ 6,340	10.49 %	5.93 %
Disability Retirees	46	214,596	21	91,332	514	7	2,176,536	4,235	8.26	3.02
Beneficiaries	99	423,360	62	211,236	1,078		4,586,436	4,255	6.91	3.25
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# PSRS SUMMARY PLAN DESCRIPTION

The Public School Retirement System of Missouri (PSRS) became operative July 1, 1946. It was established by an Act of the Missouri Legislature and is governed by Chapter 169 of the Revised Statutes of Missouri. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

PSRS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The System is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

Administration – The administration of PSRS is vested in a seven-member Board of Trustees, composed of three elected PSRS members, one elected Public Education Employee Retirement System of Missouri (PEERS) member, and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or a PEERS retiree, are named by the governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor state elected officials.

The Board appoints an executive director who is responsible for employment of the retirement office staff, routine operation of the System, and acts as an advisor to the Board on all matters pertaining to the System.

Member Participation – PSRS membership is automatic for certificated, full-time employees of public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public two-year colleges in Missouri, PSRS and certain statewide non-profit educational associations that have elected to join. Certificated, part-time employees whose services would qualify them for membership in PEERS are contributing members of PSRS unless PEERS membership is elected. The vast majority of PSRS members are not covered by Social Security. However, there are a few exceptions due to specific guidance from the Social Security Administration. Those members who are also covered by Social Security contribute to PSRS at two-thirds the rate of other members and receive two-thirds benefits.

Members working in covered employment are considered active members. Such members contribute 14.5% of total retirement salary to PSRS. The contributions are deducted and remitted by the employer and are credited by PSRS to individual member accounts. Since July 1, 1989, member contributions have been tax-deferred for federal and state income tax purposes under IRS 414(h) (2). Contributions are not considered income for such purposes until they are paid as a lump-sum refund or monthly benefits.

Interest at a rate set each year by the Board of Trustees is credited to individual member accounts each June 30 on the previous June 30 balance. The rate credited on June 30, 2013 was 1%. Since PSRS is a defined benefit plan, benefits are based upon the member's final average salary and years of service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to service earned for covered employment, members may purchase service in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-Employment Rights Act of 1994 (USERRA).

Members who have contributions on deposit with PSRS but are not working in covered employment are considered inactive members.

Employer Participation – The employers served by PSRS withhold members' contributions from salary payments and contribute an amount equal to those contributions at a current rate of 14.5% of payroll. Employer contributions and investment earnings on those funds are placed by PSRS in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. Employers are responsible for remitting contributions promptly and for furnishing contribution information and new membership records to PSRS. Employers also provide needed data when members apply for monthly benefits or for refunds upon termination of employment.

**Survivor Benefits** – The designated beneficiary of a member who dies before retirement is eligible for a lump-sum refund of the member's contributions and interest. If the beneficiary is an eligible dependent and the member dies while in covered employment with at least two years of service, or while eligible for disability retirement benefits, monthly survivor benefits based on a percentage of the member's salary for the last full year

of covered service can be elected instead of a lump-sum refund. Monthly survivor benefits may also be payable to qualified dependents of an inactive member who has at least five years of service.

In lieu of a lump-sum refund or monthly survivor benefits, survivors with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Joint-and-Survivor 100% benefit plan. Such benefits are payable when the member would have been eligible for early or normal service retirement.

**Refund of Contributions** – Member contributions and interest are fully refundable upon termination of covered employment or death. All service and benefit rights are forfeited upon voluntary refund or automatic termination of membership.

A member may, upon returning to covered employment, reinstate the service forfeited through termination of a previous membership by repaying the money refunded plus interest.

**Membership Termination** – Membership is terminated by death, retirement, refund of contributions or absence from covered employment by a non-vested member for five consecutive school years.

**Disability Retirement Benefits** – Disability retirement benefits are payable to eligible members who have met service and eligibility requirements and who, because of permanent disability, are unable to earn a livelihood in any occupation. In most instances, the disability retirement benefit is calculated at 50% of the member's salary for the last full year of service.

**Service Retirement Benefits** – Service retirement benefits are payable to members who have terminated covered employment and have met certain eligibility requirements.

Benefit Formula – All service retirement benefits are based on a formula which multiplies final average salary by the applicable benefit factor, by the years of service and, in the case of early retirement, by an age-reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36 months to arrive at a monthly average; the applicable factor is determined by the type of retirement eligibility; total service is the amount accumulated at retirement for covered employment and purchased service; and the age-reduction factor, when applicable, is determined by the age at retirement.

Normal Retirement – A member may retire with benefits calculated under the standard (2.5%) benefit factor at age 60 with five years of service, at any age with 30 years of service, or when a combination of age and service equals 80 or more. Between July 1, 2001 and July 1, 2014, a member may retire with a 2.55% benefit factor with 31 or more years of service.

**Early Retirement** – A member may retire with benefits calculated under the standard (2.5%) formula with an age-reduction factor applied, at age 55 with five years of service or at any age with 25 years of service, as long as he or she does not qualify for Rule of 80.

A special provision allows members under age 55 with 25.0 to 29.9 years of service to retire with benefits calculated under a modified benefit factor ranging from 2.2% to 2.4% with no age-reduction factor applied.

Payment Options – A retiring member may choose to receive the maximum benefits payable under the Single Life benefit plan, or may elect to receive a reduced benefit under one of three Joint-and-Survivor benefit plans or under one of two Term-Certain benefit plans, to provide survivor benefit coverage in varying degrees after the retiree's death.

Certain benefit minimums apply to normal or early retirement with 15 or more years of service. The minimums for 15 but fewer than 25 years of service are reduced if a Joint-and-Survivor or a Term-Certain benefit plan is elected and/or if an age-reduction factor is applicable because of early retirement. The minimums for 25 or more years of service are reduced only if a Joint-and-Survivor or a Term-Certain benefit plan is selected.

The Partial Lump Sum Option (PLSO) is available to qualified members. This option allows qualified members to choose to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time, lump-sum payment at retirement.

**Cost-of-Living Adjustments** – Cost-of-living adjustments (COLAs) are provided beginning the second January after retirement to service and disability retirees, and to Joint-and-Survivor and Term-Certain beneficiaries of deceased retirees. Lifetime COLAs are limited to 80% of the original retirement benefit.

The Department of Labor Consumer Price Index for Urban Consumers (CPI-U) for the previous fiscal year is used as a guideline for the annual COLA which is set by the Board of Trustees. By law, if the change in CPI-U is 2% or more, the COLA must be at least 2%, but no more than 5%. If the change in CPI-U is between 0% and 2%, the Board may grant a COLA of 0% to 5%. If the change in CPI-U is less than 0%, no increase can be given. If it is more than 5%, the Board is required to give a 5% increase. Under the Funding Stabilization Policy adopted by the Board in August 2011, a 2% COLA will be given whenever the change in CPI-U for the previous year is between 0% and 5%.

#### Member Handbook - A Member Handbook

containing detailed information concerning the retirement program is available on our website or can be obtained from the retirement office upon request.

#### PEERS SUMMARY PLAN DESCRIPTION

The Public Education Employee Retirement System of Missouri (PEERS) was established by an Act of the Missouri Legislature effective November 1, 1965, and is governed by Chapter 169 of the Revised Statutes of Missouri. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

PEERS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The System is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

**Administration** – The law provides that the responsibility for the operation and administration of the retirement system is vested in the Public School Retirement System of Missouri (PSRS) Board of Trustees sitting as the Board of Trustees for PEERS. The Board is comprised of three elected PSRS members, one elected Public Education Employee Retirement System (PEERS) member and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or a PEERS retiree, are named by the governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor state elected officials.

The Board appoints an executive director who is responsible for employment of the retirement office staff, routine operation of the System, and acts as an advisor to the Board on all matters pertaining to the System.

Member Participation – PEERS membership is automatic, regardless of position, for all persons not covered by PSRS who are employed for 20 or more hours a week on a regular basis in a position that normally requires at least 600 hours during the school term by the public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public two-year colleges in Missouri (except St. Louis Community College), PEERS and statewide non-profit educational associations that have elected to join.

Members working in covered employment are considered active members. Such members contribute 6.86% of their total retirement salary to PEERS. These amounts are deducted by the employing district and then forwarded to PEERS by the payroll officer and applied to the member's account in PEERS. PEERS members are also covered by Social Security.

PEERS membership can be elected by employees with Missouri educator certificates who work in any position for 17 or more hours weekly but less than full time; however, PSRS membership is automatic if a PEERS election is not made. The election to join PEERS must be filed with the Board of Trustees within 90 days after entering first time, part-time employment.

Since July 1, 1989, member contributions have been taxdeferred for federal and state income tax purposes under IRC 414(h)(2). Contributions are not considered as income for federal or state income tax purposes until they are paid in a lump-sum refund or in monthly benefits.

Individual accounts are maintained for all PEERS members. Interest is credited each June 30 on the previous June 30 balance. The interest rate, set annually by the Board of Trustees, was 1% on June 30, 2013. Since PEERS is a defined benefit plan, benefits are based upon the member's final average salary and years of service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to service earned for covered employment, members may purchase service in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-employment Rights Act of 1994 (USERRA).

Members who have contributions on deposit with PEERS but are not currently working in covered employment are considered inactive members.

Employer Participation – The employers served by PEERS withhold members' contributions from salary payments and contribute an amount equal to employee contributions at a current rate of 6.86% of payroll. Employer contributions and investment earnings on those funds are placed in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. It is the responsibility of the employers to remit contributions to the Retirement System promptly and to supply PEERS with new membership records and members' contribution information. Employers also provide needed data when members apply for benefits or refund of contributions upon termination of employment.

Survivor Benefits – When a member dies before retirement, the designated beneficiary becomes eligible for a lump-sum refund of the employee's contributions and interest. In lieu of a lump-sum refund, survivors with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Joint-and-Survivor 100% benefit plan. Such benefits are payable when the member would have been eligible for early or normal service retirement.

**Refund of Contributions** – Member contributions and interest are fully refundable upon termination of covered employment or death. All service and benefit rights are forfeited upon voluntary refund or automatic termination of membership.

A member may, upon returning to covered employment, reinstate the service forfeited through termination of a previous membership by repaying the money refunded plus interest.

**Membership Termination** – Membership is terminated by death, retirement, refund of contributions or absence from covered employment by a non-vested member for five consecutive school years.

**Disability Retirement Benefits** – Disability retirement benefits are payable to members who have met service and eligibility requirements and who, because of permanent disability, are unable to earn a livelihood in any occupation. The disability retirement benefit is calculated at 90% of the normal service retirement benefit.

**Service Retirement Benefits** – Service retirement benefits are payable to members who have terminated covered employment and who have met certain eligibility requirements.

Benefit Formula – All service retirement benefits are based on a formula which multiplies final average salary by the applicable benefit factor, by the years of service and, in the case of early retirement, by an age-reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36 months to arrive at a monthly average; the applicable factor is determined by the type of retirement eligibility; total service is the amount accumulated at retirement for covered employment and purchased service; and the age-reduction factor, when applicable, is determined by the age at retirement.

Because of the conversion of the System from a formula integrated with Social Security to the present basis, a special "frozen benefit" is in effect for certain members for service prior to July 1, 1973.

Normal Retirement – A member may retire with benefits calculated under the standard (1.61%) formula at age 60 with five years of service, at any age with at least 30 years of service, and at the point where the member's age plus service equals 80 or more (Rule of 80). A member may retire under the standard (1.61%) formula when the member qualifies for Rule of 80 or 30-and-Out and will receive an additional .8% multiplier until reaching minimum eligibility age for Social Security benefits (currently age 62).

**Early Retirement** – A member may retire with benefits calculated under the standard (1.61%) formula with an age-reduction factor applied at age 55 with five but fewer than 25 years of service, or at any age with 25 years of service, as long as he or she does not qualify for Rule of 80.

A special provision allows members under age 55 with 25.0 to 29.9 years of service to retire with benefits calculated under a modified benefit factor ranging from 1.51% to 1.59% with no age-reduction factor applied.

Payment Options – A retiring member may choose to receive the maximum benefits payable under the Single Life benefit plan, or may choose to receive a reduced benefit under one of three Joint-and-Survivor benefit plans or under one of two Term-Certain benefit plans, to provide survivor benefit coverage in varying degrees after the retiree's death.

Another option, the Accelerated Payment Plan (APP), allows members to receive a higher PEERS benefit prior to minimum Social Security eligibility age (currently age 62). When the minimum Social Security eligibility age is attained, the member's PEERS benefit is reduced and remains at a reduced level for the remainder of their retirement.

The Partial Lump Sum Option (PLSO) is available to qualified members. This option allows qualified members to choose to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time, lump-sum payment at retirement.

Cost-of-Living Adjustments – Cost-of-living adjustments (COLAs) are provided starting the fourth January after retirement to service and disability retirees, and to Joint-and-Survivor and Term-Certain beneficiaries of deceased retirees. Lifetime COLAs are limited to 80% of the original retirement benefit.

The Department of Labor Consumer Price Index for Urban Consumers (CPI-U) for the previous fiscal year is used as a guideline for the annual COLA which is set by the Board of Trustees. By law, if the change in CPI-U is 2% or more, the COLA must be at least 2%, but no more than 5%. If the change in CPI-U is between 0% and 2%, the Board may grant a COLA of 0% to 5%. If the change in CPI-U is less than 0%, no increase can be given. If it is more than 5%, the Board is required to give a 5% increase. Under the Funding Stabilization Policy adopted by the Board in August 2011, a 2% COLA will be given whenever the change in CPI-U for the previous year is between 0% and 5%.

**Member Handbook** – A *Member Handbook* containing detailed information concerning the retirement program is available on our website or can be obtained from the retirement office upon request.

## PSRS AND PEERS SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

#### Inflation

Inflation is assumed to be 2.50% per year (effective 6/30/11).

#### **Payroll Growth**

Total payroll growth for PSRS is assumed to be 3.50% per year, consisting of 2.50% inflation, 0.50% additional inflation due to the inclusion of healthcare costs in pension earnings, and 0.50% of real wage growth (effective 6/30/11).

**PSRS - Individual Salary Growth** General Healthcare **Total** Service Inflation Inflation Longevity Increase 2.50% 0.50% 0 7.00% 10.00% 1-4 0.50% 4.00%7.00% 2.50% 5 2.50% 0.50% 3.80% 6.80% 6 0.50% 3.60% 6.60% 2.50% 7 2.50% 0.50% 3.40% 6.40% 8 2.50% 0.50% 3.20% 6.20% 9 2.50% 0.50% 3.00% 6.00% 10 0.50% 2.50% 2.80% 5.80% 11 2.50% 0.50% 2.60% 5.60% 12 2.50% 0.50% 2.40% 5.40% 13 2.50% 0.50% 2.20% 5.20% 14 2.50% 0.50% 2.00% 5.00% 15 2.50% 0.50% 2.00% 5.00% 16 0.50% 1.90% 4.90% 2.50% 17 2.50% 0.50% 1.90% 4.90% 18 2.50% 0.50% 1.80% 4.80% 19 2.50% 0.50% 1.80% 4.80% 20 1.70% 4.70% 2.50% 0.50% 21 2.50% 0.50% 1.70% 4.70% 22 4.60% 2.50% 0.50% 1.60% 23 2.50% 0.50% 1.60% 4.60% 24 2.50% 0.50% 1.50% 4.50% 25 2.50% 0.50% 1.50% 4.50% 0.50% 26 2.50% 1.40% 4.40% 27 2.50% 0.50% 1.30% 4.30% 28 2.50% 0.50% 1.20% 4.20% 29 2.50% 0.50% 1.10% 4.10% 30+ 2.50% 0.50% 1.00% 4.00%

Total payroll growth for PEERS is assumed to be 3.75% per year, consisting of 2.50% inflation, 0.75% additional inflation due to the inclusion of healthcare costs in pension earnings, and 0.50% of real wage growth (effective 6/30/11).

#### **Individual Salary Growth**

Salaries are assumed to increase each year with general inflation of 2.50%, plus healthcare inflation of 0.50% for PSRS and 0.75% for PEERS (since healthcare costs are included in pension earnings), plus a longevity adjustment that accounts for merit, promotion and other real wage growth (effective 6/30/11).

	PEERS – Individual Salary Growth						
Service	General Inflation	Healthcare Inflation	Longevity	Total Increase			
0	2.50%	0.75%	8.75%	12.00%			
1	2.50%	0.75%	4.00%	7.25%			
2	2.50%	0.75%	3.50%	6.75%			
3	2.50%	0.75%	3.25%	6.50%			
4	2.50%	0.75%	3.00%	6.25%			
5	2.50%	0.75%	2.90%	6.15%			
6	2.50%	0.75%	2.80%	6.05%			
7	2.50%	0.75%	2.70%	5.95%			
8	2.50%	0.75%	2.60%	5.85%			
9	2.50%	0.75%	2.50%	5.75%			
10	2.50%	0.75%	2.40%	5.65%			
11	2.50%	0.75%	2.30%	5.55%			
12	2.50%	0.75%	2.20%	5.45%			
13	2.50%	0.75%	2.10%	5.35%			
14	2.50%	0.75%	2.00%	5.25%			
15	2.50%	0.75%	1.95%	5.20%			
16	2.50%	0.75%	1.90%	5.15%			
17	2.50%	0.75%	1.85%	5.10%			
18	2.50%	0.75%	1.80%	5.05%			
19	2.50%	0.75%	1.75%	5.00%			
20+	2.50%	0.75%	1.75%	5.00%			

#### **Investment Return**

It is assumed that investments of the System will return a yield of 8.0% per year, net of System expenses (investment and administrative) (effective 1980).

#### **Cost-of-Living Adjustments**

The cost-of-living adjustment (COLA) assumed in the valuation is 2.0% per year, based on the current policy of the Board to grant a 2.0% COLA whenever annual inflation, as measured by the CPI-U index for a fiscal year, increases between 0.00% and 5.0%. The COLA applies to service retirements and beneficiary annuities. The COLA does not apply to the benefits for in-service death payable to spouses (where the spouse is over age 60), and does not apply to the spouse with children pre-retirement survivor benefit, the dependent children pre-retirement survivor benefit, or the dependent parent pre-retirement survivor benefit. The total lifetime COLA cannot exceed 80% of the original benefit. Future COLAs for current benefit recipients reflect actual cumulative adjustments granted at the time of valuation (effective 6/30/11).

#### **Mortality Rates**

Mortality rates for active members are based on the RP 2000 Mortality Table, set back one year for males and six years for females, then projected to 2016 using Scale AA. Illustrative rates per 1,000 members at various ages are as follows (effective 6/30/11):

PSRS and PEERS Active Member Mortality					
Age	Male	Female			
20	0.244	0.131			
30	0.380	0.171			
40	0.898	0.342			
50	1.492	0.782			
60	4.593	2.237			
70	15.549	7.955			
80	49.322	22.752			
90	156.083	66.254			
100	324.963	179.896			
110	400.000	279.055			

Mortality rates for non-disabled retirees and beneficiaries are based on the RP 2000 Mortality Table, set back one year for both male and female members of PSRS and one year for male members of PEERS, then projected to 2016 using Scale AA. Illustrative rates per 1,000 members at various ages are as follows (effective 6/30/11):

PSRS Service	Retiree, Beneficiary and S	urvivor Mortality
Age	Male	Female
40	0.898	0.509
50	1.492	1.178
60	4.593	4.099
70	15.549	13.715
80	49.322	37.094
90	156.083	113.562
100	324.963	227.712
110	400.000	351.544

PEERS Service	ce Retiree, Beneficiary and S	Survivor Mortality
Age	Male	Female
20	0.263	0.148
30	0.461	0.225
40	1.004	0.554
50	1.831	1.274
60	5.930	4.665
70	19.292	15.452
80	61.340	41.002
90	187.360	125.502
100	352.933	233.696
110	400.000	364.617

Mortality rates for disabled retirees are based on the RP 2000 Disabled Retiree Mortality Table. Illustrative rates per 1,000 members at various ages are as follows (effective 6/30/11):

PSRS an	PSRS and PEERS Disability Retiree Mortality						
Age	Male	Female					
40	22.571	7.450					
50	28.975	11.535					
60	42.042	21.839					
70	62.583	37.635					
80	109.372	72.312					
90	183.408	140.049					
100	344.556	237.467					
110	400.000	364.617					

#### **Retirement Rates**

Prior to July 1, 2013, retirement is assumed in accordance with the following rates per 1,000 eligible PSRS members (effective 6/30/11):

	PSRS Active Member Retirement Prior to July 1, 2013											
	Years of Service											
Age	<=20	21	22	23	24	25	26	27	28	29	30	>=31
< 50	0	0	0	0	0	50	50	50	50	50	200	400
50	0	0	0	0	0	50	50	50	50	50	200	400
51	0	0	0	0	0	50	50	50	50	200	200	400
52	0	0	0	0	0	50	50	50	200	200	200	400
53	0	0	0	0	0	50	50	300	200	200	200	400
54	0	0	0	0	0	50	300	200	200	200	200	400
55	50	50	50	50	50	400	200	200	200	200	200	400
56	50	50	50	50	400	200	200	200	200	200	200	400
57	50	50	50	400	200	200	200	200	200	200	200	400
58	50	50	400	200	200	200	200	200	200	200	200	400
59	50	400	200	200	200	200	200	200	200	200	200	400
60	150	150	150	150	150	200	200	200	200	200	200	400
61	150	150	150	150	150	200	200	200	200	200	200	400
62	150	150	150	150	150	200	200	200	200	200	200	400
63	150	150	150	150	150	200	200	200	200	200	200	400
64	150	150	150	150	150	200	200	200	200	200	200	400
65	250	250	250	250	250	400	400	400	400	400	400	400
66	250	250	250	250	250	300	300	300	300	300	300	400
67	250	250	250	250	250	300	300	300	300	300	300	400
68	250	250	250	250	250	300	300	300	300	300	300	400
69	250	250	250	250	250	300	300	300	300	300	300	400
>70	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

After June 30, 2013, retirement is assumed in accordance with the following rates per 1,000 PSRS eligible members (effective 6/30/11):

	PSRS Active Member Retirement After June 30, 2013											
	Years of Service											
Age	<=20	21	22	23	24	25	26	27	28	29	30	>=31
<50	0	0	0	0	0	0	0	0	0	0	450	450
50	0	0	0	0	0	0	0	0	0	0	450	450
51	0	0	0	0	0	0	0	0	0	200	450	450
52	0	0	0	0	0	0	0	0	200	200	450	450
53	0	0	0	0	0	0	0	300	200	200	450	450
54	0	0	0	0	0	0	300	200	200	200	450	450
55	50	50	50	50	50	400	200	200	200	200	450	450
56	50	50	50	50	400	200	200	200	200	200	450	450
57	50	50	50	400	200	200	200	200	200	200	450	450
58	50	50	400	200	200	200	200	200	200	200	450	450
59	50	400	200	200	200	200	200	200	200	200	450	450
60	150	150	150	150	150	200	200	200	200	200	450	450
61	150	150	150	150	150	200	200	200	200	200	450	450
62	150	150	150	150	150	200	200	200	200	200	450	450
63	150	150	150	150	150	200	200	200	200	200	450	450
64	150	150	150	150	150	200	200	200	200	200	450	450
65	250	250	250	250	250	400	400	400	400	400	450	450
66	250	250	250	250	250	300	300	300	300	300	450	450
67	250	250	250	250	250	300	300	300	300	300	450	450
68	250	250	250	250	250	300	300	300	300	300	450	450
69	250	250	250	250	250	300	300	300	300	300	450	450
70	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

PEERS retirement is assumed in accordance with the following rates per 1,000 eligible members (effective 6/30/11):

	PEERS Retirement Rates							
		Ye	ars of S	ervice				
Age	<=25	25	26	27	28	29	30+	
<50	0	50	50	50	50	50	150	
50	0	50	50	50	50	50	250	
51	0	50	50	50	50	250	150	
52	0	50	50	50	250	150	150	
53	0	50	50	250	150	150	150	
54	0	50	250	150	150	150	150	
55	30	270	170	170	170	170	170	
56	30	170	170	170	170	170	170	
57	30	170	170	170	170	170	170	
58	30	170	170	170	170	170	170	
59	30	170	170	170	170	170	170	
60	160	160	160	160	160	160	160	
61	100	100	100	100	100	100	100	
62	240	240	240	240	240	240	240	
63	200	200	200	200	200	200	200	
64	140	140	140	140	140	140	140	
65	260	260	260	260	260	260	260	
66	200	200	200	200	200	200	200	
67	200	200	200	200	200	200	200	
68	200	200	200	200	200	200	200	
69	200	200	200	200	200	200	200	
70	200	200	200	200	200	200	200	
71	200	200	200	200	200	200	200	
72	200	200	200	200	200	200	200	
73	200	200	200	200	200	200	200	
74	200	200	200	200	200	200	200	
75+	1000	1000	1000	1000	1000	1000	1000	

#### **Refund Rates**

Termination of membership prior to eligibility for retirement from all causes other than death, disability or retirement, whether resulting in a refund or a deferred benefit, is assumed in accordance with the following illustrative rates per 1,000 members (2006).

PSRS					
Years of Service	Rate				
0	190.0				
1	105.0				
2	85.0				
3	73.0				
4	62.0				
5	52.0				
10	23.0				
15	12.0				
20	5.0				
25+	0.0				

PEER	S
Years of Service	Rate
0	300.0
1	220.0
2	150.0
3	120.0
4	100.0
5	81.0
10	48.0
15	33.0
20	18.0
25+	0.0

#### **Refund of Contributions**

It is assumed that 88% of those leaving after earning five years of service with PSRS leave their contributions in the fund and receive a vested benefit. The remaining 12% are assumed to take an immediate refund of their contributions, thus forfeiting their vested retirement benefit. If the present value of the deferred benefit is less than the member account balance, the member's account balance is valued (effective 6/30/11).

It is assumed that 80% of those leaving after earning five years of service with PEERS leave their contributions in the fund and receive a vested benefit. The remaining 20% are assumed to take an immediate refund of their contributions, thus forfeiting their vested retirement benefit. If the present value of the deferred benefit is less than the member account balance, the member's account balance is valued (effective 6/30/11).

It is assumed that 100% of those leaving prior to earning five years of service will take an immediate refund of their contributions.

#### **Disability Rates**

Retirement for disability prior to age 60 is assumed in accordance with the following illustrative rates per 1,000 eligible members (effective 6/30/11):

PSRS					
Age	Rates				
25	0.017				
30	0.080				
35	0.160				
40	0.320				
45	0.610				
50	0.960				
55	1.310				

PEERS					
Rates					
0.080					
0.160					
0.320					
0.640					
1.040					
1.680					
0.000					

#### **Interest on Member Accounts**

1.00% per annum (6/30/10).

#### Service Purchases

A 2.0% load is added to the normal cost to account for anticipated losses resulting from service purchases and reinstatements (effective 6/30/11).

#### **Provisions for Expenses**

There is no specific provision for expenses. The implicit assumption is that administrative expenses are paid from investment income in excess of 8.0% per year (effective 1980).

#### **Dependent Assumptions**

(Effective 6/30/11)

- Eighty percent of male members and 70% of female members are assumed to be married.
- Beneficiaries are assumed to be of the opposite sex from the member.
- Male and female members are assumed to be four years older than their beneficiary.

#### Joint-and-Survivor Election

To recognize the subsidy present in the Joint-and-Survivor reduction factors calculated without provision for cost-of-living adjustments, the active member costs resulting from all decrements except disability and refunds were loaded by 0.4%.

#### **Survivor Benefits (PSRS only)**

All active members under age 50 are assumed to have two dependent children. Each child is assumed to receive payments of \$860 per month for 18 years if the member is under age 32, and grading down to zero years if the member is age 50 (effective 6/30/11).

#### **Return of Unused Member Account Balance**

Under the Single Life benefit plan, any unused balance of contributions and interest in the member account balance at the time of death is paid in a lump sum to a designated beneficiary. This benefit is approximated with a five-year certain benefit.

#### **Actuarial Cost Method**

The actuarial cost method is Entry Age Normal-Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date (effective 1947).

#### **Asset Valuation Method**

The actuarial value of assets is a smoothed value of assets. The actuarial value for a year is computed by taking the actuarial value at June 30 of the prior year, subtracting all expenses (including benefit payments), and adding contributions and expected investment return at 8% of actuarial value of assets. The difference between the actual returns at market value for the year and expected returns is determined. Twenty percent of that difference is added to the actuarial value along with corresponding amounts from each of the prior four years. The actuarial value of assets was reset to market value at June 30, 2003 (effective 1994).

## Amortization of Unfunded Actuarial Accrued Liability

Gains and losses occurring from census experience different than assumed and assumption changes are amortized over a 30-year period as a level percent of payroll. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 30-year period. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities. Increases or decreases in the actuarial accrued liability caused by changes in the benefit provisions are amortized over 20 years, as determined in the 2007 session of the Legislature.

The method for amortizing the unfunded actuarial accrued liability was changed from a rolling 30-year method to the closed 30-year method described above effective June 30, 2011.

Note: Dates reflect the effective date as adopted by the Board of Trustees. The most recent assumption analysis was performed as of June 30, 2011. The revised assumptions were used beginning with the June 30, 2011 valuation.



Non-Teacher Retirement System of Missouri or NTRS) was created in 1965 to provide Missouri's non-certificated public school employees and their families with a significant and stable source of retirement income.

Anyone who has spent any time at their child's school quickly realizes it takes many hands to keep such a complex operation running smoothly. PEERS members play important roles in our schools, and in the lives of the students who attend them.

After a career dedicated to being there for others, we are proud to say to our retired PEERS members, "We are here for you." Enjoy the retirement security you have earned while serving others.



### **STATISTICAL SECTION**

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PEERS Schedule of Covered Employees in the Top 10 Employers for the 10 Years Ended June, 2013

#### STATISTICAL SUMMARY

#### **Benefit Recipients**

The largest percentage of the Systems' benefit recipients are service retirees. Service retirement benefits are payable to members who have met age and service requirements. The number of PSRS service retirees on the payment rolls increased by 1,752 from 45,842 at June 30, 2012 to 47,594 at June 30, 2013. The number of PEERS service retirees on the payment rolls increased by 980 from 20,454 at June 30, 2012 to 21,434 at June 30, 2013. An additional 52 PSRS service retirees and 85 PEERS service retirees had their benefits on hold at June 30, 2013.

Disability benefits in PSRS and PEERS are paid to members who are unable to earn a livelihood due to permanent disability and who have met certain eligibility requirements. The number of PSRS disability retirees on the payment rolls increased by 41 from 801 at June 30, 2012 to 842 at June 30, 2013. An additional one disability retiree had his benefit on hold. The number of PEERS disability retirees on the payment rolls increased by 40 from 665 at June 30, 2012 to 705 at June 30, 2013. An additional four disability retirees had their benefit on hold.

In both PSRS and PEERS, beneficiary payments are available to survivors if the retiree elected this option. Three Joint-and-Survivor benefit plans and two Term-Certain benefit plans are available. In PSRS, survivor benefits are also available to designated beneficiaries of members who die before retirement.

The charts on page 108 detail the number of benefit recipients by type and monthly benefit amount for each System.

#### **Pension Funding**

An unfunded actuarial accrued liability (UAAL) for pension benefits generally represents the difference between the present value of all benefits estimated to be payable to plan members as a result of their age, salary and service through the valuation date and the actuarial value of plan assets available to pay those benefits. This amount changes over time as a result of changes in accrued benefits, pay levels, rates of return on investments, changes in actuarial assumptions, and changes in the demographics of the employee base. Each year an outside actuary performs a valuation to determine the present value of the benefits payable (actuarial accrued liability) and compares this to the assets available to arrive at the funded status of the Systems.

The charts on page 116 show a comparison of the assets and liabilities of the Systems over time. At June 30, 2013, PSRS was 80.1% pre-funded and PEERS was 81.6% pre-funded. These percentages have decreased from the June 30, 2012 pre-funded percentages of 81.5% for PSRS and 82.5% for PEERS.

#### **Changes in Net Assets**

The charts on page 109 detail a 10-year history of the additions (revenue) and deductions (expenses) of the Systems.

Other charts in this section detail demographic information concerning our members and employers.

The data in this section was derived from internal sources and the annual actuarial valuation reports.

PSRS Summary of Benefit Recipients By Type As of June 30, 2013											
	Beneficiary Recipients										
Amount of Monthly Benefit	Service Retirement	Disability Retirement	Disability	Survivors	Beneficiary	Term-Certain	Total				
<\$1,000	4,047	36	116	728	377	5	5,309				
\$1,000 - \$1,999	6,013	372	66	2	774	5	7,232				
\$2,000 - \$2,999	10,470	329	12	-	721	6	11,538				
\$3,000 - \$3,999	12,199	94	2	-	506	5	12,806				
\$4,000 - \$4,999	8,514	10	1	-	283	5	8,813				
\$5,000 - \$5,999	4,027	2	-	-	137	2	4,168				
\$6,000+	2,376	-	-	-	64	-	2,440				
Total	47,646	843	197	730	2,862	28	52,306				

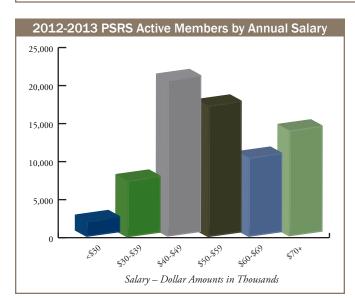
PEERS Summary of Benefit Recipients By Type As of June 30, 2013									
				Beneficiary l	Recipients				
Amount of Monthly Benefit	Service Retirement	Disability Retirement	Disability	Survivors*	Beneficiary	Term-Certain	Total		
<\$500	12,315	504	155	-	856	21	13,851		
\$500 - \$999	5,093	175	24	-	258	10	5,560		
\$1,000 - \$1,999	3,121	30	2	-	105	1	3,259		
\$2,000 - \$2,999	687	-	-	-	10	1	698		
\$3,000 - \$3,999	196	-	-	-	3	-	199		
\$4,000+	107	-	-	-	-	-	107		
Total	21,519	709	181	-	1,232	33	23,674		

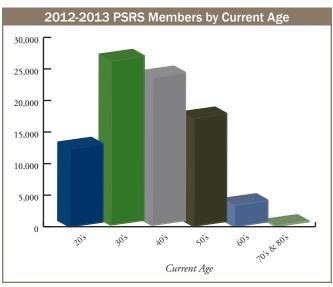
 $<sup>^{\</sup>star}$  Benefit not available in PEERS.

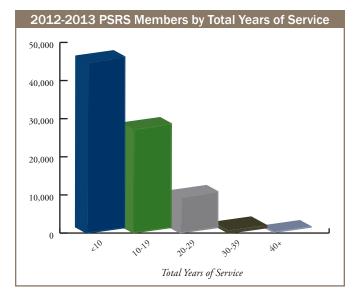
(Dollar amounts in thousands	5)									
					Fiscal Year					
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Additions by source										
Member contributions \$ 4	105,614	\$ 432,500	\$ 502,980	\$ 514,163	\$ 572,810	\$ 599,582	\$ 636,633	\$ 638,357	\$ 620,214	\$ 665,92
Employer contributions 3	359,763	389,416	429,579	472,217	521,242	563,454	594,326	594,732	658,936	634,04
Investment income 2,4	102,566	1,958,622	2,235,836	4,125,164	(1,385,701)	(5,301,374)	2,723,032	5,018,519	449,822	3,378,53
Other income	488	476	264	280	370	627	867	930	441	2
Total additions by source 3,1	168,431	2,781,014	3,168,659	5,111,824	(291,279)	(4,137,711)	3,954,858	6,252,538	1,729,413	4,678,51
Deductions by type										
Monthly benefits										
Service retirement 9	958,181	1,057,430	1,152,217	1,254,164	1,363,571	1,490,693	1,584,382	1,674,931	1,775,305	1,880,78
Service retirement -PLSO	9,176	32,479	40,177	52,122	59,793	74,042	52,117	69,956	69,392	61,06
Disability	12,720	13,613	14,297	14,982	15,599	16,355	17,284	18,406	19,640	21,12
Beneficiary	44,663	49,056	54,148	59,295	64,011	70,518	75,922	82,327	85,894	92,79
Lump-sum refunds										
Death	7,173	6,131	7,188	6,801	7,058	7,274	7,075	7,763	9,295	8,34
Refund/transfers	28,845	28,215	29,206	37,209	39,243	39,134	41,084	45,876	45,161	47,05
Administrative										
expenses/other	5,274	5,614	6,754	7,113	8,074	10,135	10,430	8,839	8,135	8,71
Total deductions by type 1,0	066,032	1,192,538	1,303,987	1,431,686	1,557,349	1,708,151	1,788,294	1,908,098	2,012,822	2,119,87
Changes in plan										
net position $\frac{1}{\$2,1}$	102,399	\$1,588,476	\$1,864,672	\$3,680,138	\$(1,848,628)	\$(5,845,862)	\$ 2,166,564	\$ 4,344,440	\$ (283,409)	\$2,558,64

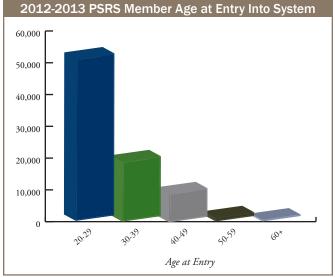
	PEERS Schedule of Changes in Plan Net Position, Last 10 Fiscal Years										
(Dollar amounts in thousa	nds)										
Fiscal Year											
_	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Additions by source											
Member contributions \$	50,625	\$ 55,699	\$ 68,018	\$ 73,071	\$ 81,370	\$ 89,427	\$ 95,924	\$ 95,792	\$ 95,095	\$ 103,271	
Employer contributions	49,977	53,110	61,746	69,235	77,989	85,916	91,479	90,816	101,930	97,059	
Investment income	198,389	170,921	197,629	373,198	(130,619)	(489,552)	261,135	502,934	39,774	353,729	
Other income	10	9	3	-	-	1	-	-	-	-	
Total additions by source	299,001	279,739	327,396	515,504	28,740	(314,208)	448,538	689,542	236,799	554,059	
Deductions by type											
Monthly benefits											
Service retirement	69,899	77,333	84,664	93,716	104,352	115,757	124,928	136,912	150,334	163,134	
Service retirement -PLSC	520	1,527	2,487	3,454	3,133	3,676	2,972	5,178	7,191	5,006	
Disability	1,503	1,686	1,840	1,968	2,125	2,353	2,514	2,798	3,057	3,430	
Beneficiary	2,949	3,360	3,670	4,044	4,454	4,881	5,382	5,881	6,363	7,094	
Lump-sum refunds											
Death	593	647	542	816	675	765	790	1,047	1,113	1,202	
Refund/transfers	9,827	11,245	11,502	12,883	14,833	14,908	15,921	17,776	17,357	17,434	
Administrative											
expenses/other	3,210	3,564	4,358	4,427	4,682	5,440	5,280	5,611	5,591	4,803	
Total deductions by type	88,501	99,362	109,063	121,308	134,254	147,780	157,787	175,203	191,006	202,103	
Changes in plan											
net position \$	210,500	\$ 180,377	\$ 218,333	\$ 394,196	\$ (105,514)	\$ (461,988)	\$ 290,751	\$ 514,339	\$ 45,793	\$ 351,956	
	210,500	\$ 180,377	\$ 218,333	\$ 394,196	\$ (105,514)	\$ (461,988)	\$ 290,751	\$ 514	,339	,339 \$ 45,793	

	PSRS Summary of C	hanges in Membership Du	uring 2012-2013	
		Male	Female	Total
Membership July 1, 2012		19,756	69,296	89,052
New members added		1,354	4,339	5,693
Less:	Service retirements	547	2,085	2,632
	Disability retirements	10	58	68
	Refunds	459	1,291	1,750
	Deaths	21	29	50
	Memberships terminated	82	436	518
	Other	2	0	2
	Total removed	1,121	3,899	5,020
Net change in membership 2012-2013		233	440	673
Membership June 30, 2013		19,989	69,736	89,725

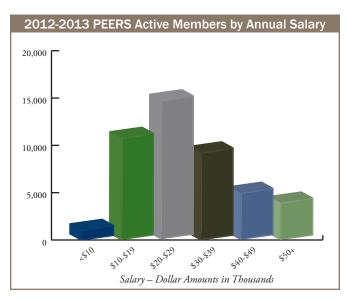


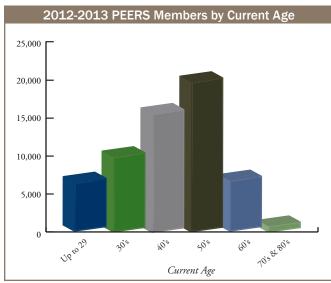


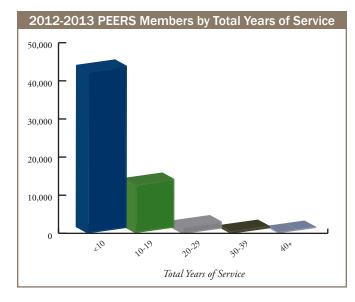


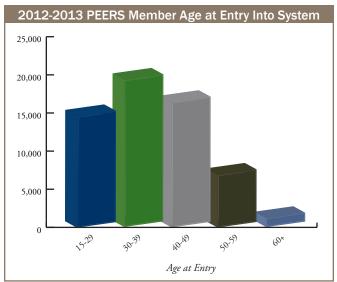


PEERS Summary of (	Changes in Membership D	uring 2012-2013	
	Male	Female	Total
Membership July 1, 2012		47,437	63,157
pers added	2,054	4,467	6,521
Service retirements	456	1,191	1,647
Disability retirements	18	50	68
Refunds	977	2,263	3,240
Deaths	38	59	97
Memberships terminated	386	1,081	1,467
Other	1	10	11
Total removed	1,876	4,654	6,530
Net change in membership 2012-2013		(187)	(9)
Membership June 30, 2013		47,250	63,148
	sip July 1, 2012  Deers added  Service retirements  Disability retirements  Refunds  Deaths  Memberships terminated  Other  Total removed  e in membership 2012-2013	Male  ip July 1, 2012  15,720  pers added  2,054  Service retirements  456  Disability retirements  18  Refunds  977  Deaths  38  Memberships terminated  Other  1  Total removed  in membership 2012-2013  Male	Service retirements     456       Disability retirements     18       Refunds     977       Deaths     38       Memberships terminated     386       Other     1       Total removed     1,876       456     1,191       50     2,263       977     2,263       10     10       11     10       12     10       1376     4,654       2012-2013     178       (187)



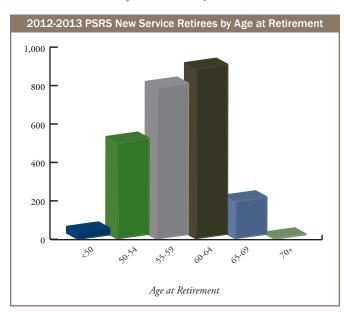


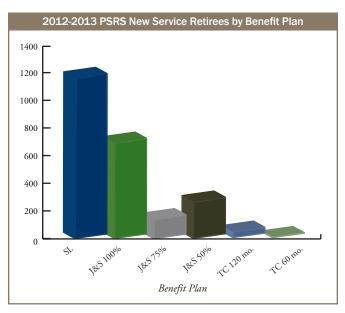


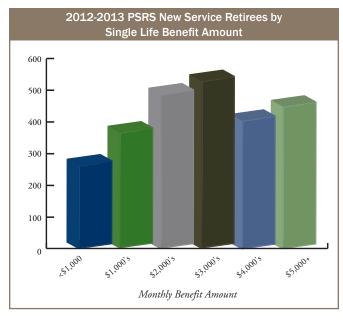


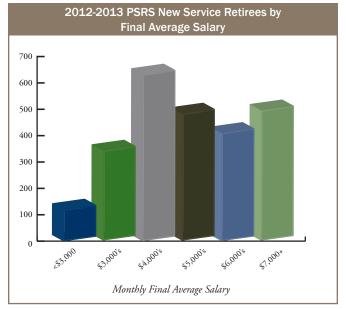
PSRS 2012-2013 New Service Retirees								
Service Retirees	Disability Retirees	Beneficiaries						
45,842	801	3,564						
2,642	68	332						
(891)	(26)	(120)						
1	(1)	(21)						
47,594	842	3,755						
	Service Retirees  45,842 2,642 (891) 1	Service Retirees         Disability Retirees           45,842         801           2,642         68           (891)         (26)           1         (1)						

Note: An additional 115 benefits were on hold at June 30, 2013.



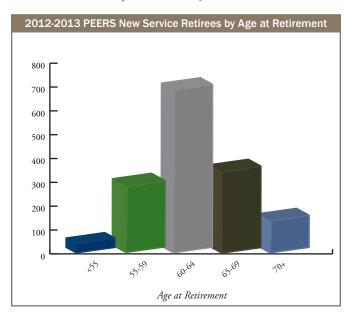


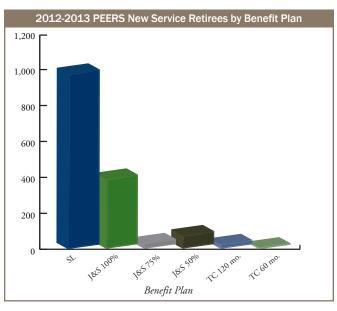


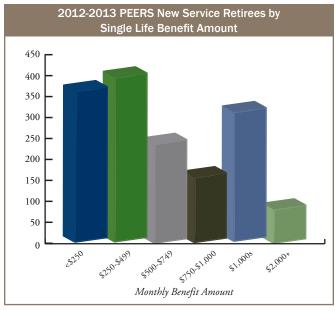


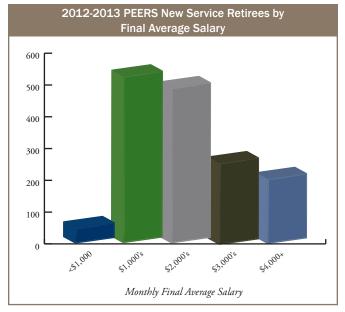
	PEERS 2012-2013 New Service Re	tillees	
	Service Retirees	Disability Retirees	Beneficiaries
Retirees July 1, 2012	20,454	665	1,356
Added during the Year	1,656	68	164
Died during the Year	(674)	(27)	(73)
Other	(2)	(1)	(4)
Retirees June 30, 2013	21,434	705	1,443

Note: An additional 92 benefits were on hold at June 30, 2013.









					Years of Ser	vice				
	5 - 9.9	1	0 - 14.9	15 - 19.9	20 - 24.9	25 - 29	.9 3	30 - 34.9	35 - 39.9	40+
2012-2013										
Average monthly benefit	\$ 695	\$	1,327	\$ 2,035	\$ 3,143	\$ 3,92	27 \$	4,998	\$ 6,739	\$ 6,033
Average final average salary	4,067		4,554	4,818	5,609	5,89	16	6,212	7,218	6,033
Number of retirees	233		263	286	483	69	2	593	79	13
2011-2012										
Average monthly benefit	\$ 607	\$	1,261	\$ 1,995	\$ 2,980	\$ 3,82	24 \$	4,893	\$ 6,071	\$ 5,262
Average final average salary	3,946		4,305	4,795	5,317	5,71	3	6,070	6,506	5,262
Number of retirees	248		265	293	531	72	.3	767	81	18
2010-2011										
Average monthly benefit	\$ 661	\$	1,262	\$ 1,969	\$ 3,010	\$ 3,79	2 \$	4,815	\$ 6,231	\$ 6,595
Average final average salary	4,074		4,298	4,754	5,366	5,64	2	5,974	6,662	6,595
Number of retirees	267		322	289	540	73	3	832	126	13
2009-2010										
Average monthly benefit	\$ 556	\$	1,123	\$ 1,915	\$ 2,865	\$ 3,60	50 \$	4,836	\$ 6,133	\$ 5,639
Average final average salary	3,396		3,840	4,566	5,110	5,40		6,007	6,559	5,678
Number of retirees	271		243	207	412	47		653	97	19
2008-2009										
Average monthly benefit	\$ 627	\$	1,178	\$ 2,035	\$ 2,861	\$ 3,59	90 \$	4,598	\$ 6,028	\$ 5,749
Average final average salary	3,901		4,057	4,801	5,136	5,34	3	5,697	6,436	5,749
Number of retirees	198		186	198	411	61	7	892	116	11
2007-2008										
Average monthly benefit	\$ 612	\$	1,079	\$ 1,876	\$ 2,765	\$ 3,45	3 \$	4,410	\$ 6,124	\$ 6,515
Average final average salary	3,741		3,792	4,548	4,935	5,15	i9	5,494	6,607	6,51
Number of retirees	226		197	200	406	64	6	798	105	12
2006-2007										
Average monthly benefit	\$ 614	\$	1,014	\$ 1,772	\$ 2,748	\$ 3,28	\$3 \$	4,322	\$ 6,145	\$ 5,820
Average final average salary	3,848		3,499	4,319	4,889	4,93	4	5,380	6,576	5,820
Number of retirees	162		160	159	338	65	3	783	115	
2005-2006										
Average monthly benefit	\$ 572	\$	1,021	\$ 1,709	\$ 2,558	\$ 3,20	3 \$	4,299	\$ 5,555	\$ 5,83
Average final average salary	3,659		3,628	4,214	4,580	4,85	4	5,346	5,985	5,833
Number of retirees	177		137	137	358	77	78	744	96	
2004-2005										
Average monthly benefit	\$ 579	\$	1,314	(1)	\$ 2,977	(	2) \$	4,240	(3)	\$ 5,75
Average final average salary	3,630		3,783	(1)	4,652	(	2)	5,216	(3)	5,75
Number of retirees	158		323	(1)	1,165	(	2)	973	(3)	1
2003-2004										
Average monthly benefit	\$ 510	\$	1,363	(1)	\$ 2,944	(	2) \$	4,205	(3)	\$ 4,04
Average final average salary	3,243		3,849	(1)	4,582	(	2)	5,155	(3)	4,04
Number of retirees	158		269	(1)	1,097	(	2)	927	(3)	1:

Prior year data is not available in five-year service increments. Chart will be updated as data is available.

<sup>(1)</sup> Column to the left covers those with 10 to 19.9 years of service.

<sup>(2)</sup> Column to the left covers those with 20 to 29.9 years of service.

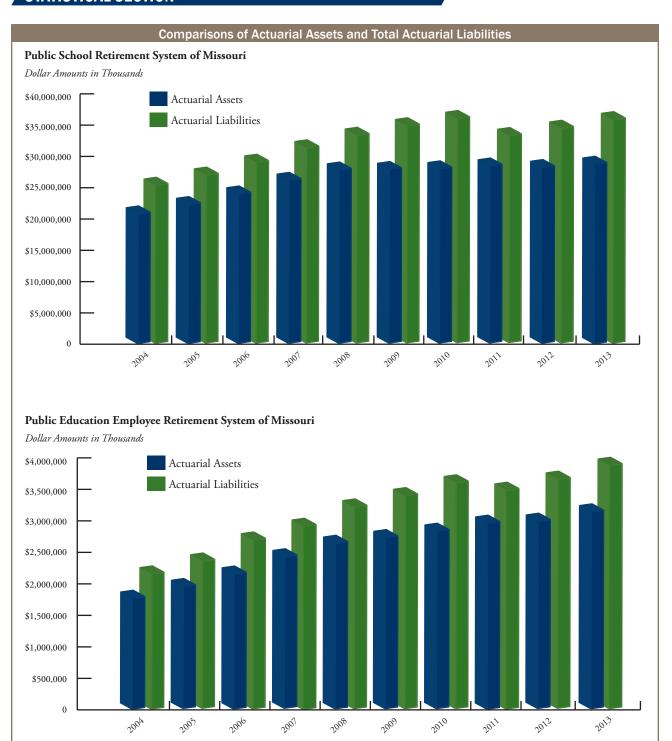
<sup>(3)</sup> Column to the left covers those with 30 to 39.9 years of service.

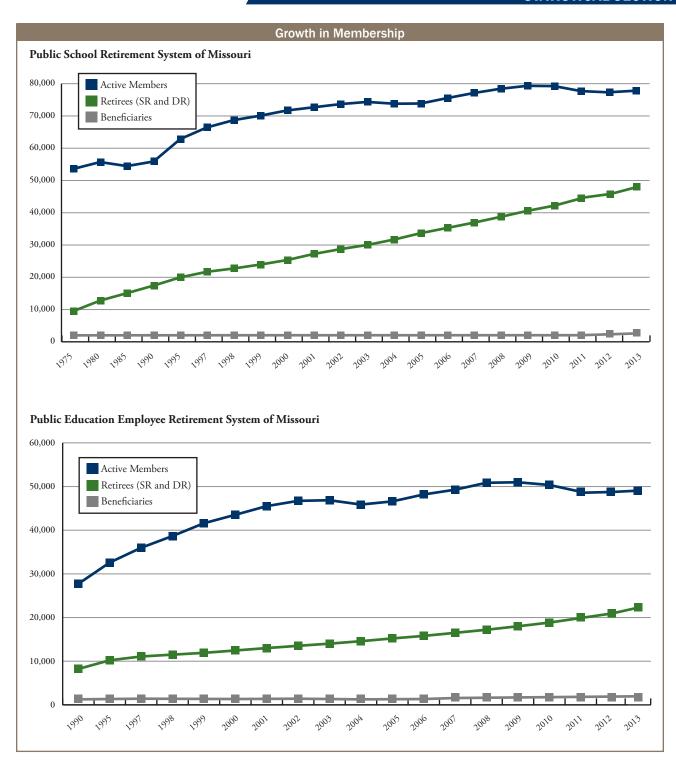
						Years	of Servi	ce			
	5	- 9.9	10	- 14.9	15	5 - 19.9	2	0 - 24.9	25	5 - 29.9	30+
2012-2013											
Average monthly benefit	\$	219	\$	467	\$	735	\$	1,104	\$	1,512	\$ 1,995
Average final average salary		1,958		2,439		2,734		3,054		3,491	3,672
Number of retirees		475		362		250		275		173	121
2011-2012											
Average monthly benefit	\$	227	\$	433	\$	705	\$	1,063	\$	1,508	\$ 1,957
Average final average salary		2,010		2,257		2,597		2,954		3,502	3,637
Number of retirees		516		371		246		250		184	147
2010-2011											
Average monthly benefit	\$	221	\$	410	\$	707	\$	1,052	\$	1,389	\$ 1,947
Average final average salary		1,965		2,176		2,628		2,920		3,195	3,61
Number of retirees		487		345		231		244		185	164
2009-2010											
Average monthly benefit	\$	196	\$	384	\$	635	\$	979	\$	1,330	\$ 1,885
Average final average salary		1,769		2,034		2,339		2,723		3,060	3,582
Number of retirees		503		316		162		180		122	117
2008-2009											
Average monthly benefit	\$	206	\$	374	\$	637	\$	1,021	\$	1,365	\$ 1,727
Average final average salary		1,821		2,011		2,349		2,847		3,104	3,240
Number of retirees		417		264		152		216		164	112
2007-2008											
Average monthly benefit	\$	187	\$	382	\$	655	\$	966	\$	1,274	\$ 1,605
Average final average salary		1,741		2,070		2,451		2,724		2,930	2,969
Number of retirees		363		262		142		229		155	94
2006-2007											
Average monthly benefit	\$	174	\$	363	\$	637	\$	861	\$	1,240	\$ 1,61
Average final average salary		1,607		1,918		2,368		2,423		2,838	3,038
Number of retirees		370		214		166		224		158	88
2005-2006											
Average monthly benefit	\$	178	\$	370	\$	586	\$	822	\$	1,111	\$ 1,45
Average final average salary		1,611		1,971		2,134		2,306		2,564	2,708
Number of retirees		310		184		165		177		156	77
2004-2005											
Average monthly benefit	\$	159	\$	401		(1)	\$	952		(2)	\$ 1,468
Average final average salary		1,454		1,788		(1)		2,427		(2)	2,771
Number of retirees		306		366		(1)		322		(2)	97
2003-2004											
Average monthly benefit	\$	167	\$	402		(1)	\$	906		(2)	\$ 1,250
Average final average salary		1,519		1,737		(1)		2,305		(2)	2,397
Number of retirees		222		338		(1)		306		(2)	71

Prior year data is not available in five-year service increments. Chart will be updated as data is available.

<sup>(1)</sup> Column to the left covers those with 10 to 19.9 years of service.

<sup>(2)</sup> Column to the left covers those with 20 to 29.9 years of service.





Total - 538 Employers

PSRS Schedule of Covered Employees in the	PSRS Schedule of Covered Employees in the Top 10 Employers for the 10 Years Ended June 30, 2013										
	20	013	20	12							
	Covered	Percentage	Covered	Percentage							
Employer	Employees	of Total	Employees	of Total							
Special School District - St. Louis	3,080	4%	3,039	4%							
Springfield R-XII Schools	2,096	3%	2,096	3%							
Rockwood R-VI Schools	1,888	2%	1,910	2%							
North Kansas City Schools	1,763	2%	1,699	2%							
Parkway C-2 Schools	1,714	2%	1,794	2%							
Columbia Public Schools	1,649	2%	1,640	2%							
Hazelwood R-I Schools	1,600	2%	1,589	2%							
Ft. Zumwalt R-II Schools	1,549	2%	1,508	2%							
Francis Howell R-III Schools	1,538	2%	1,494	2%							
Lee's Summit R-VII Schools	1,360	2%	1,341	2%							
All Others	63,377	77%	62,775	77%							

81,614

100%

80,885

100%

	2011		2010	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	3,020	4%	3,021	4%
Springfield R-XII Schools	2,116	3%	2,132	3%
Rockwood R-VI Schools	1,936	2%	1,990	2%
Parkway C-2 Schools	1,789	2%	1,745	2%
North Kansas City Schools	1,663	2%	1,630	2%
Columbia Public Schools	1,592	2%	1,612	2%
Francis Howell R-III Schools	1,559	2%	1,573	2%
Ft. Zumwalt R-II Schools	1,525	2%	1,493	2%
Hazelwood R-I Schools	1,510	2%	1,549	2%
Lee's Summit R-VII Schools	1,412	2%	1,435	2%
All Others	62,525	77%	63,994	77%
Total - 538 Employers during 2011 and 539 during 2010	80,647	100%	82,174	100%

	2009		2008	
<b>Employer</b>	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,931	4%	2,913	4%
Springfield R-XII Schools	2,089	3%	2,037	3%
Rockwood R-VI Schools	1,893	2%	1,773	2%
Parkway C-2 Schools	1,656	2%	1,589	2%
Columbia Public Schools	1,594	2%	1,626	2%
Hazelwood R-I Schools	1,578	2%	1,639	2%
North Kansas City Schools	1,497	2%	1,517	2%
Francis Howell R-III Schools	1,462	2%	1,468	2%
Ft. Zumwalt R-II Schools	1,441	2%	1,395	2%
Lee's Summit R-VII Schools	1,358	2%	1,337	2%
All Others	63,490	77%	62,964	77%
Total - 541 Employers during 2009	80,989	100%	80,258	100%
and 543 during 2008				

PSRS Schedule of Covered Employees in the Top 10 Employers for the 10 Years Ended June 30, 2013 (continued)				
	2007		2006	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,861	4%	2,809	4%
Springfield R-XII Schools	2,031	3%	1,983	3%
Rockwood R-VI Schools	1,751	2%	1,724	2%
Columbia Public Schools	1,560	2%	1,533	2%
Parkway C-2 Schools	1,520	2%	1,522	2%
North Kansas City Schools	1,483	2%	1,450	2%
Hazelwood R-I Schools	1,481	2%	1,461	2%
Francis Howell R-III Schools	1,459	2%	1,444	2%
Ft. Zumwalt R-II Schools	1,351	2%	1,340	2%
Lee's Summit R-VII Schools	1,285	2%	1,262	2%
All Others	61,939	77%	60,766	77%
Total - 544 Employers during 2007 and 545 during 2006	78,721	100%	77,294	100%

	2	2005		2004	
<b>Employer</b>	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total	
Special School District - St. Louis	2,771	4%	2,799	4%	
Springfield R-XII Schools	1,914	3%	1,902	2%	
Rockwood R-VI Schools	1,690	2%	1,768	2%	
Parkway C-2 Schools	1,575	2%	1,700	2%	
Columbia Public Schools	1,490	2%	1,500	2%	
Hazelwood R-I Schools	1,486	2%	1,451	2%	
North Kansas City Schools	1,430	2%	1,494	2%	
Francis Howell R-III Schools	1,397	2%	1,464	2%	
Ft. Zumwalt R-II Schools	1,270	2%	1,259	2%	
Lee's Summit R-VII Schools	1,179	2%	1,178	2%	
All Others	59,427	77%	60,407	78%	
Total - 545 Employers	75,629	100%	76,922	100%	

Note: Schedules reflect total members reported at any time during the fiscal year.

PEERS Schedule of Covered Employees in the Top 10 Employers for the 10 Years Ended June 30, 2013				
	2013		2012	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,386	5%	2,481	5%
Springfield R-XII Schools	1,488	3%	1,478	3%
North Kansas City Schools	1,246	2%	1,216	2%
Rockwood R-VI Schools	1,179	2%	1,222	2%
Lee's Summit R-VII Schools	1,164	2%	1,171	2%
Ft. Zumwalt R-II Schools	1,141	2%	1,131	2%
Independence Public Schools	1,065	2%	1,071	2%
Parkway C-2 Schools	1,041	2%	1,085	2%
Columbia Public Schools	982	2%	945	2%
Hazelwood R-I Schools	961	2%	964	2%
All Others	38,464	76%	38,222	76%
Total - 534 Employers during 2013 and 535 during 2012	51,117	100%	50,986	100%

	2011		2010	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,532	5%	2,584	5%
Springfield R-XII Schools	1,502	3%	1,473	3%
Rockwood R-VI Schools	1,206	2%	1,251	2%
North Kansas City Schools	1,203	2%	1,229	2%
Lee's Summit R-VII Schools	1,174	2%	1,198	2%
Ft. Zumwalt R-II Schools	1,128	2%	1,131	2%
Parkway C-2 Schools	1,106	2%	1,091	2%
Independence Public Schools	1,082	2%	1,149	2%
Hazelwood R-I Schools	977	2%	1,015	2%
Columbia Public Schools	906	2%	932	2%
All Others	38,146	76%	39,295	76%
Total - 534 Employers during 2011 and 535 during 2010	50,962	100%	52,348	100%

	2009		2008	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,685	5%	2,619	5%
Springfield R-XII Schools	1,463	3%	1,464	3%
North Kansas City Schools	1,266	2%	1,213	2%
Rockwood R-VI Schools	1,248	2%	1,241	2%
Lee's Summit R-VII Schools	1,203	2%	1,203	2%
Independence Public Schools	1,167	2%	1,058	2%
Ft. Zumwalt R-II Schools	1,129	2%	1,131	2%
Parkway C-2 Schools	1,102	2%	1,106	2%
Hazelwood R-I Schools	995	2%	1,017	2%
Columbia Public Schools	950	2%	1,026	2%
All Others	39,754	76%	39,715	76%
Total - 535 Employers	52,962	100%	52,793	100%

PEERS Schedule of Covered Employees in the Top 10 Employers for the 10 Years Ended June 30, 2013 (continued)					
	2	2007		2006	
Employer	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total	
Special School District - St. Louis	2,514	5%	2,483	5%	
Springfield R-XII Schools	1,418	3%	1,374	3%	
Rockwood R-VI Schools	1,200	2%	1,177	2%	
Lee's Summit R-VII Schools	1,167	2%	1,138	2%	
North Kansas City Schools	1,158	2%	1,144	2%	
Parkway C-2 Schools	1,101	2%	1,120	2%	
Ft. Zumwalt R-II Schools	1,051	2%	1,023	2%	
Columbia Public Schools	1,008	2%	992	2%	
Independence Public Schools	978	2%	920	2%	
Hazelwood R-I Schools	931	2%	914	2%	
All Others	38,903	76%	37,874	76%	
Total - 536 Employers	51,429	100%	50,159	100%	

	2005		2004	
<b>Employer</b>	Covered Employees	Percentage of Total	Covered Employees	Percentage of Total
Special School District - St. Louis	2,467	5%	2,129	4%
Springfield R-XII Schools	1,328	3%	1,333	3%
Rockwood R-VI Schools	1,213	2%	1,230	3%
North Kansas City Schools	1,117	2%	1,132	2%
Lee's Summit R-VII Schools	1,072	2%	984	2%
Parkway C-2 Schools	1,070	2%	1,145	2%
Ft. Zumwalt R-II Schools	968	2%	952	2%
Columbia Public Schools	957	2%	942	2%
Hazelwood R-I Schools	912	2%	907	2%
Independence Public Schools	910	2%	939	2%
All Others	36,634	76%	36,473	76%
Total - 536 Employers	48,648	100%	48,166	100%

 ${\it Note: Schedules \ reflect \ total \ members \ reported \ at \ any \ time \ during \ the \ fiscal \ year.}$ 



# PSRS/PEERS/

PUBLIC SCHOOL & EDUCATION EMPLOYEE RETIREMENT SYSTEMS OF MISSOURI

